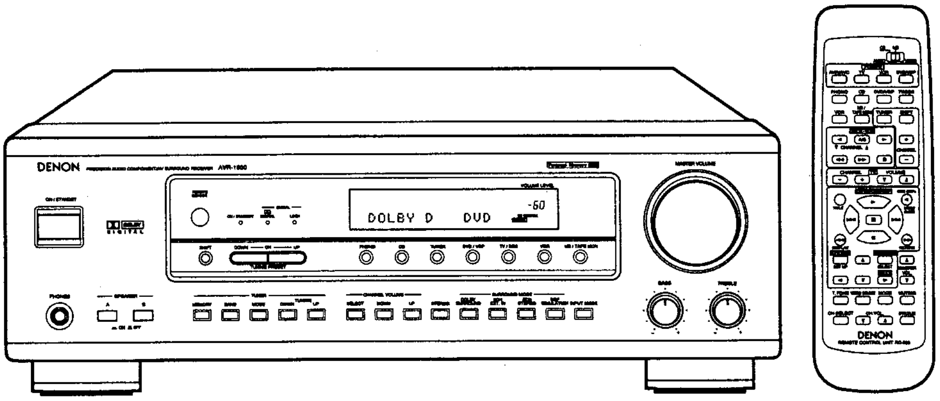
DENON

Hi-Fi AV Surround Receiver

SERVICE MANUAL

MODEL AVR-1600/1600RD

AV SURROUND RECEIVER



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●Some illustrations using in this service manual are slightly different from the actual set.

NIPPON COLUMBIA CO., LTD.

SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

SPECIFICATIONS

AUDIO SECTION

(Power Amplifier)

Rated output:	Front:	60 W + 60 W	(8 Ω/ohms, 20 Hz ~ 20 kHz with 0.08 % T.H.D.)
		80 W + 80 W	(6 Ω/ohms, EIAJ for Asia model)
	Center:	60 W	(8 Ω/ohms, 20 Hz ~ 20 kHz with 0.08 % T.H.D.)
		80 W	(6 Ω/ohms, EIAJ for Asia model)
	Surround:	60 W + 60 W	(8 Ω/ohms, 20 Hz ~ 20 kHz with 0.08 % T.H.D.)
		80 W + 80 W	(6 Ω/ohms, EIAJ for Asia model)
Output terminals:	Front:	A or B	6 to 16 Ω/ohms (U.S.A./Canada), 8 to 16 Ω/ohms (Europe/U.K./Asia)
		A + B	12 to 16 Ω/ohms (U.S.A./Canada), 16 Ω/ohms or more (Europe/U.K./Asia)
	Center/Surround:		6 to 16 Ω/ohms (U.S.A./Canada), 8 to 16 Ω/ohms (Europe/U.K./Asia)

(Analog)

LINE input-PRE OUT	
Input sensitivity/input impedance:	200 mV/47 kΩ/kohms
Frequency response:	10 Hz ~ 50 kHz: +1, −3 dB
S/N ratio:	92 dB (IHF-A weighted)
Total harmonic distortion:	0.05 % (20 Hz ~ 20 kHz)
Rated output:	1.2 V
PHONO input-REC OUT	
Input sensitivity/input impedance:	2.5 mV/47 kΩ/kohms
RIAA deviation:	±1 dB (20 Hz ~ 20 kHz)
S/N ratio:	74 dB (IHF-A weighted, with 5 mV input)
Total harmonic distortion:	0.03 % (1 kHz, 3 V)
Rated output/Maximum output:	150 mV/7 V

VIDEO SECTION

(Standard Video Jacks)

Input/output level and impedance:	1 V p-p, 75 Ω/ohms
Frequency response:	5 Hz ~ 10MHz +1, −3 dB

TUNER SECTION

	[FM] (Note: µV at 75 Ω/ohms, 0 dBf = 1×10^{-15} W)		**[AM]**
Receiving range:	87.50 MHz ~ 107.90 MHz		520 kHz ~ 1710 kHz
Usable sensitivity:	1.0 µV (11.2 dBf)		18 µV
50 dB quieting sensitivity:	MONO	1.6 µV (15.3 dBf)	
	STEREO	23 µV (38.5 dBf)	
S/N ratio:	MONO	80 dB (IHF-A weighted)	
	STEREO	75 dB (IHF-A weighted)	
Total harmonic distortion:	MONO	0.2 % (1 kHz)	
	STEREO	0.4 % (1 kHz)	

GENERAL

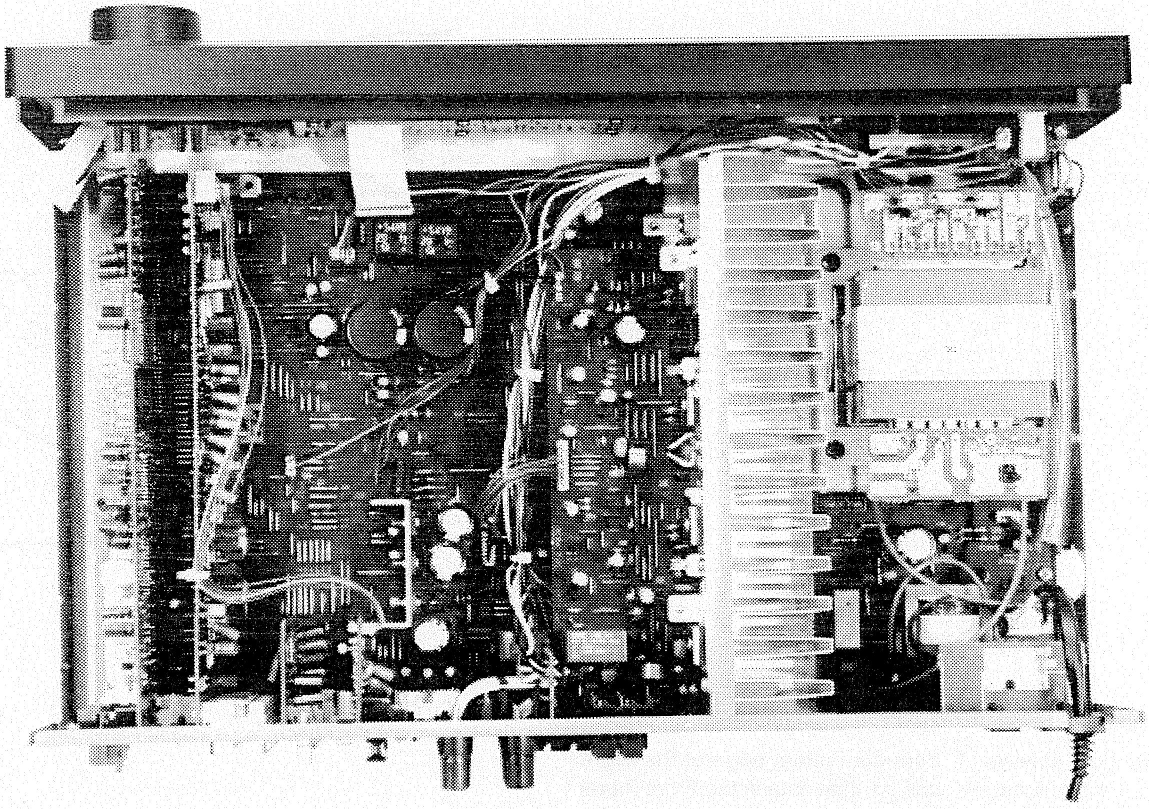
Power supply:	AC115/230 V, 50/60 Hz (Asia model) AC230 V, 50 Hz (Europe & U.K. models) AC120 V, 60 Hz (U.S.A. & Canada models)
Power consumption:	3.0 A (U.S.A. & Canada models), 180 W (Europe & U.K. & Asia models)
Maximum external dimensions:	434 (W) × 144 (H) × 315 (D) mm (17-3/32″ × 5-43/64″ × 12-13/32″)
Weight:	7.0 kg (lbs)

REMOTE CONTROL UNIT (RC-859)

Batteries:	R6P/AA Type (two batteries)
External dimensions:	54 (W) × 172 (H) × 27.2 (D) mm (2-1/8″ × 6-49/64″ × 1-5/64″)
Weight:	100 g (Approx. 6 oz) (including batteries)

WIRE ARRANGEMENT

In case of wires require unclasping or loosening to move the location, to perform adjustment or part replacement, be sure to rearrange them neatly to restore properly in the same location as they were originally placed, or causing to produce a noise may occasionally occur.

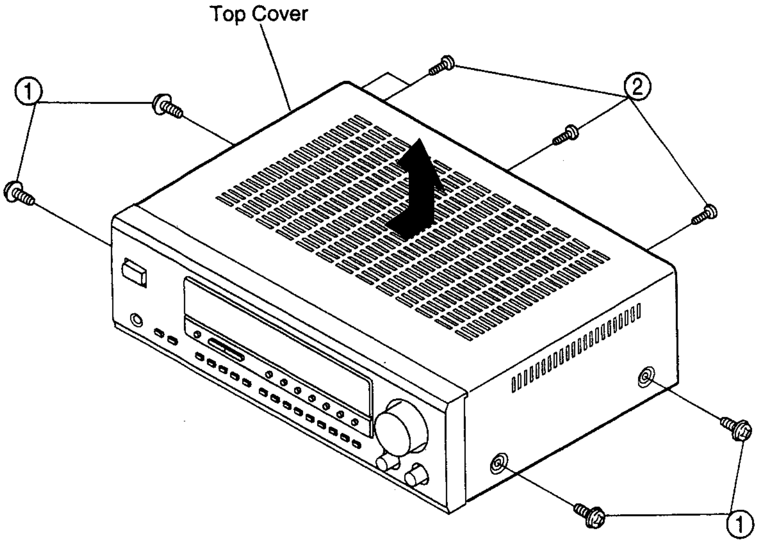


DISASSEMBLY

(Follow the procedure below in reverse order when reassembling)

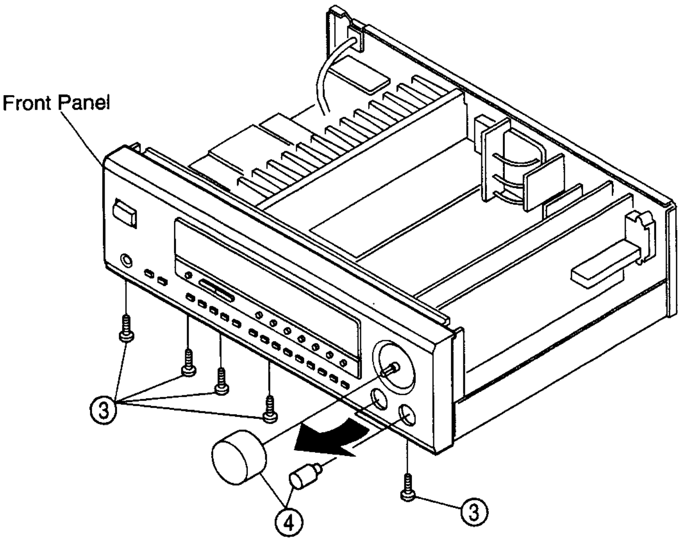
1. Top Cover

Remove 4 screws ① on both sides and 4 screws ② on the rear to detach the Top Cover as shown in the arrow direction.



2. Front Panel

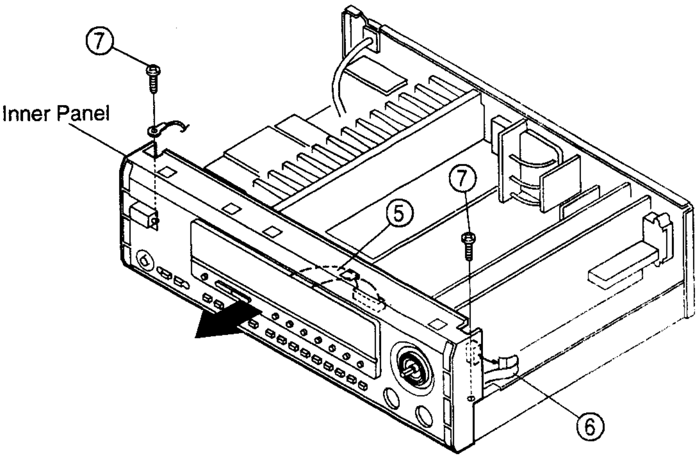
Remove 5 screws ③ from the bottom edge of the Front Panel and pull out 3 Knobs④, then detach the Front Panel as shown in the arrow direction.



3. Inner Panel

(1) Disconnect 2 FFCs ⑤ and ⑥.

(2) Detach the Inner Panel in the arrow direction after removing 2 screws ⑦.

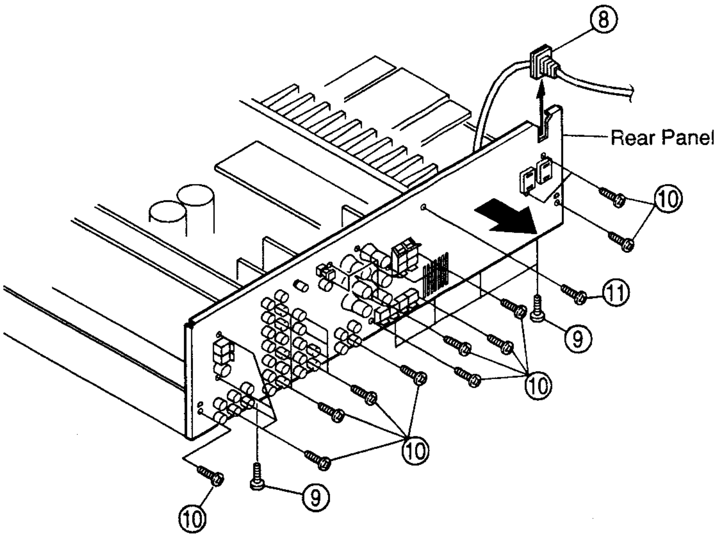

⑦
Inner Panel
⑦
⑤
⑥

4. Rear Panel

(1) Pull out the Cord Bush⑧.

(2) Remove 5 screws ⑨ from the bottom edge and 25 screws ⑩ from the rear.

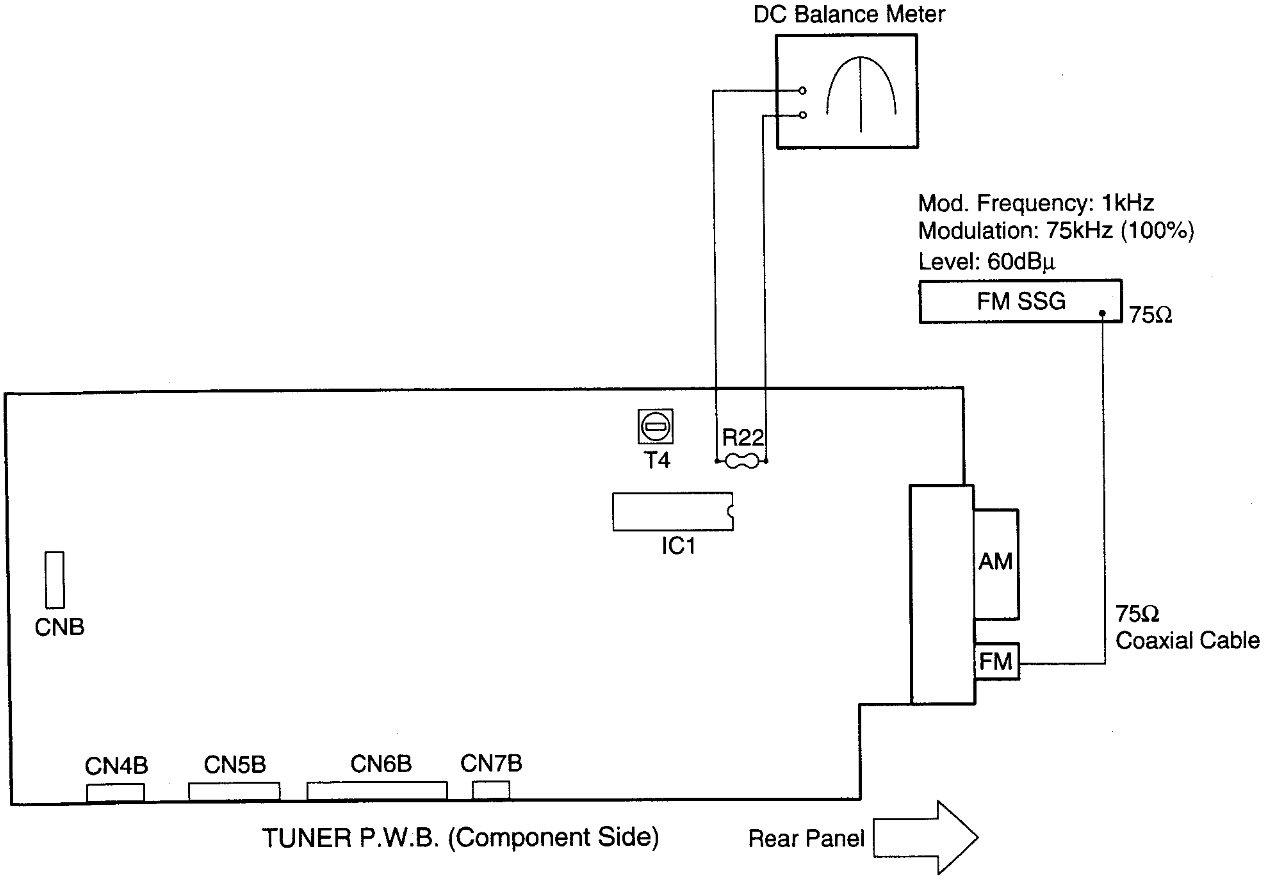
(3) Detach the Rear Panel in the arrow direction after removing 1 screw ⑪.


⑧
Rear Panel
⑩
⑪
⑨
⑩
⑩
⑩
⑨

ADJUSTMENT

1. TUNER ADJUSTMENT (Band Button: FM, MONO/AUTO Button: AUTO)

Step	Alignment Item	Tuning Frequency Setting	Input					Output		Adjust		Remaks
			Type	Frequency	Input Level	Modulation	Coupling	Type	Connect to	Points	Adjust to	
1	FM DC Balance	98 MHz	FM SSG	98 MHz	60 dBμ	1 kHz 75 kHz DEV	FM Antenna Terminal	DC Balance Meter	R22	T4	0±30mV	Mono. Modulation

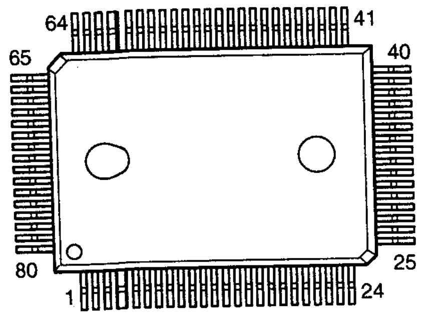

DC Balance Meter
Mod. Frequency: 1kHz
Modulation: 75kHz (100%)
Level: 60dBμ
FM SSG
75Ω
T4
R22
IC1
CNB
AM
FM
75Ω
Coaxial Cable
CN4B
CN5B
CN6B
CN7B
Rear Panel

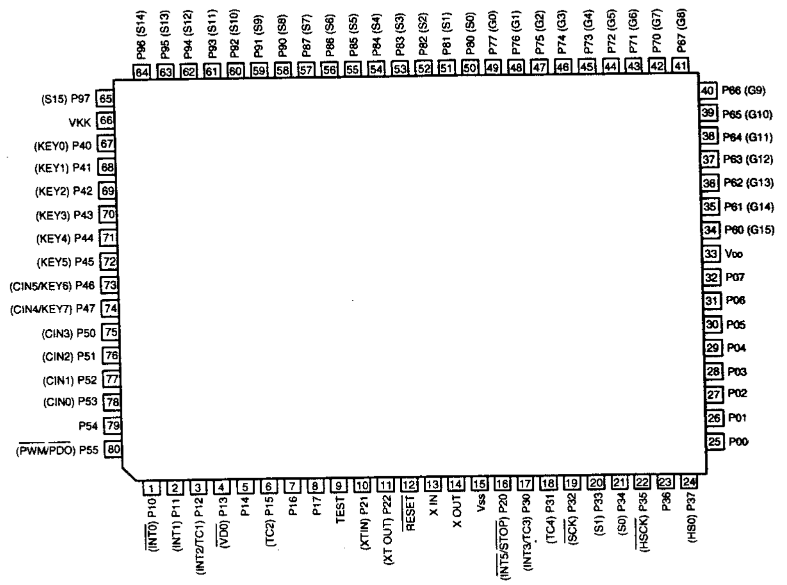
TUNER P.W.B. (Component Side)

SEMICONDUCTORS

● IC's

TMP87CS71AF (IC801)





TMP87CS71AF (IC801) Terminal Function

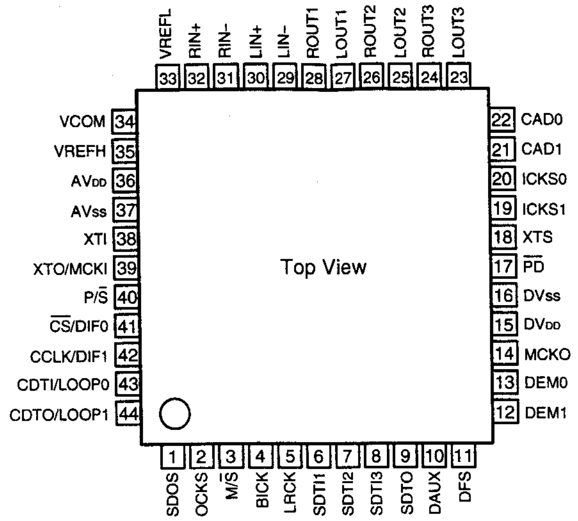
Pin No.	Name	Symbol	I/O	Typ	OP	Det	Res	Ini	ST-BY	Function
1	P10/INT 0	PROTECT	I	—	—	E&L	Z	—	—	Protection detect input, H: Detected
2	P11/INT 1	POWER	O	C	—	—	Z	L	L	Power control output, L: On
3	P12/INT 2	RDS START	I	—	—	Ed	Z	—	—	RDS data input (LC7074)
4	P13/DVO	STEREO/MONO	O	C	—	—	Z	L	L	Stereo/Mono control signal, L: Stereo receive
5	P14	PLL-STB	O	C	—	—	Z	L	L	LC72131M control output
6	P15/TC2	DIN B	O	C	—	—	Z	L	L	Digital input control signal (TC74HC151)
7	P16	DIN C	O	C	—	—	Z	L	L	Digital input control signal (TC74HC151)
8	P17	TUNED SIGNAL	I	—	—	Lv	Z	—	—	Tuning detection
9	TEST	TEST	I	—	GND	S	—	—	—	Connect to GND
10	P21/XT IN	STEREO SIGNAL	I	—	Eu	Lv	Z	—	—	Stereo detection, L: Stereo receive
11	P22/XTO	PHONES	I	—	Eu	Lv	Z	—	—	Headphone insertion detect, H: Insertion detect
12	RESET	RESET	I	—	Eu	Lv	L	—	—	Reset input
13	XIN	XIN	I	—	—	—	—	—	—	X'tal oscillation input (4MHz)
14	XOUT	XOUT	O	—	—	—	—	—	—	X'tal oscillation output (4MHz)
15	Vss	Vss	I	—	GND	—	—	—	—	Connect to GND
16	P20/INT5	STOP	I	—	Eu	Lv	Z	—	—	Power-down detection, L: Power-down
17	P30/INT3	REMOCON	I	—	Eu	E&L	Z	—	—	Remote control signal input
18	P31/TC4	Not used	O	N	—	—	Z	L	L	Fixed to L-out
19	P32/SCK	RDS CLK	I	—	—	S	Z	—	—	RDS clock input (LC7074)
20	P33/SI	RDS DATA	I	—	—	S	Z	—	—	RDS data input (LC7074)
21	P34/SO	RDS RESET	O	N	Eu	—	Z	H	H	RDS reset output (LC7074)
22	P35/HSCK	DSP RES	O	N	Eu	—	Z	H	H	DSP/CODEC control terminal (ZR38601, AK4526)
23	P36	DSP DATA	O	N	S	—	Z	H	H	DSP/CODEC control terminal (ZR38601, AK4526)
24	P37/HSO	DSP CLK	O	N	S	—	Z	H	H	DSP/CODEC control terminal (ZR38601, AK4526)
25	P00	FR GAIN	O	C	—	—	Z	H	H	Front CH gain switching signal
26	P01	FL RES	O	C	—	S	Z	L	L	FL display control output (LC75721)
27	P02	FL PLL DATA	O	C	—	S	Z	H	H	FL display and PLL control output (LC75721, LC72131M)
28	P03	FL PLL CLK	O	C	—	S	Z	H	H	FL display and PLL control output (LC75721, LC72131M)
29	P04	FUNC STB	O	C	—	—	Z	L	L	Function control output (TC9273F, TC9164AF)
30	P05	FUNC CLK	O	C	—	S	Z	L	L	Function control output (TC9273F, TC9164AF)
31	P06	FUNC DATA	O	C	—	S	Z	L	L	Function control output (TC9273F, TC9164AF)
32	P07	96k CONT	O	C	—	—	Z	L	L	Stereo 96kHz mode switching terminal, H: Mode on
33	VDD	VDD	I	—	—	—	—	—	—	Connect to +5V
34	P60	E VOL CE2	O	P	Id	—	L	L	L	E. volume control output (LC7536R), Center/S Woofer/Surround ch
35	P61	E VOL CE1	O	P	Id	—	L	L	L	E. volume control output (LC7536R), Front L/R ch
36	P62	E VOL CLK	O	P	Id	—	L	H	L	E. volume control output (LC7536R)
37	P63	E VOL DATA	O	P	Id	—	L	H	L	E. volume control output (LC7536R)
38	P64	96K DET	I	—	Id	—	L	L	L	96kHz detect input, H: Detected (to ZR38601/GPIO1)
39	P65	ERR MUTE	O	P	Id	—	L	H	H	Muting control for CODEC pop noise, H: Mute & power-on
40	P66	Not used	O	P	Id	—	L	L	L	Fixed to L-out

Pin No.	Name	Symbol	I/O	Typ	OP	Det	Res	Ini	ST-BY	Function
41	P67	Not used	O	P	Id	—	L	L	L	Fixed to L-out
42	P70	TUNER MUTE	O	P	Id	—	H	H	H	Tuner mute output, H: Mute
43	P71	Not used	O	P	Id	—	L	L	L	Fixed to L-out
44	P72	FL CE	O	P	Id	—	L	H	H	FL display control output (LC75721)
45	P73	STANDBY LED	O	P	Id	—	L	H	H	Standby LED driving output, H: Light
46	P74	AC-3 LED	O	P	Id	—	L	L	L	AC-3 LED driving output, H: Light
47	P75	LOCK LED	O	P	Id	—	L	L	L	Lock LED driving output, H: Light
48	P76	Not used	O	P	Id	—	L	L	L	Fixed to L-out
49	P77	VOL MUTE	O	P	Id	—	L	L	L	Master volume muting control, L: Mute
50	P80	SW MUTE	O	P	Id	—	L	H	L	Sub-woofer output muting control, L: Mute
51	P81	Not used	O	P	Id	—	L	L	L	Fixed to L-out
52	P82	SP F	O	P	Id	—	L	H	L	Front speaker relay control output, L: Mute
53	P83	SP C	O	P	Id	—	L	L	L	Center speaker relay control output, L: Mute
54	P84	SP S	O	P	Id	—	L	L	L	Surround speaker relay control output, L: Mute
55	P85	Not used	O	P	Id	—	L	L	L	Fixed to L-out
56	P86	Not used	O	P	Id	—	L	L	L	Fixed to L-out
57	P87	Not used	O	P	Id	—	L	L	L	Fixed to L-out
58	P90	Not used	O	P	Id	—	L	L	L	Fixed to L-out
59	P91	ZORANSS	O	P	Id	—	L	L	L	DSP control terminal (ZR38601)
60	P92	Not used	O	P	Id	—	L	L	L	Fixed to L-out
61	P93	Not used	O	P	Id	—	L	L	L	Fixed to L-out
62	P94	ERR	I	—	Id	—	L	L	L	DIR ERR detect input, H: ERR (to ZR38601/GPIO0)
63	P95	DTS	I	—	Id	—	L	L	L	DTS stream detect input, H: Detected (to ZR38601/GPIO5)
64	P96	CSI	I	—	Id	—	L	—	—	Digital signal select terminal, H: PCM (to ZR38601/GPIO3)
65	P97	Not used	O	P	Id	—	L	L	L	Fixed to L-out
66	VKK	VKK	I	—	—	—	—	—	—	Connect to GND
67	P40/KEY0	A	O	N	Eu	—	Z	L	L	Video input control, H: Selected
68	P41/KEY1	B	O	N	Eu	—	Z	L	L	Video input control, H: Selected
69	P42/KEY2	C	O	N	Eu	—	Z	L	L	Video input control, H: Selected
70	P43/KEY3	M VOL SEL B	I	—	Eu	Lv	Z	—	—	Master volume setting input (rotary encoder)
71	P44/KEY4	M VOL SEL A	I	—	Eu	Lv	Z	—	—	Master volume setting input (rotary encoder)
72	P45/KEY5	PO SW	I	—	Eu	Lv	Z	—	—	Power SW for USA and Japan versions
73	P46/CIN5	MODE	I	—	Eu	Lv	Z	—	—	Destination select
74	P47/CIN4	RDS SEL	I	—	Eu	Lv	Z	—	—	RDS on/off setting, H: On
75	P50/CIN3	KEY4	I	—	Eu	Lv	Z	—	—	Button input 4
76	P51/CIN2	KEY3	I	—	Eu	Lv	Z	—	—	Button input 3
77	P52/CIN1	KEY2	I	—	Eu	Lv	Z	—	—	Button input 2
78	P53/CIN0	KEY1	I	—	Eu	Lv	Z	—	—	Button input 1
79	P54	Not used	O	N	Eu	—	L	L	L	Fixed to L-out
80	P55/PWW	SO	I	—	Eu	Lv	Z	—	—	DSP control terminal (ZR38601)

NOTE:

Pin No. : Terminal number of microcomputer.
Port Name : The name entered in the data sheet of microcomputer.
Symbol : Symbolized interface function.
I/O : Input or out of part.
"I" = Input port
"O" = Output port
Type : Composition of port in case of output port.
"C" = CMOS output
"N" = NMOS open drain output
"P" = PMOS open drain output
Op : Pull up/Pull down selection information.
"Iu" = Inner microcomputer pull up
"Id" = Inner microcomputer pull down
"Eu"= External microcomputer pull up
"Ed"= External microcomputer pull down
Det : Indicates judging state of input port. Level detection is "LV"; Edge detection is "Ed"; Detection by both shifting is "E&L"; Serial data detection is "S" (Serial data output is also "S").
Res : State at reset.
"H" = Outputs High Level at reset
"L" = Outputs Low Level at reset
"Z" = Becomes High impedance mode at reset
Ini : Initial output state.
Function : Function and logical level explanation of signals to be interface.

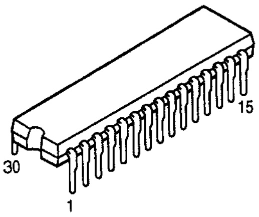
AK4526A (IC240)

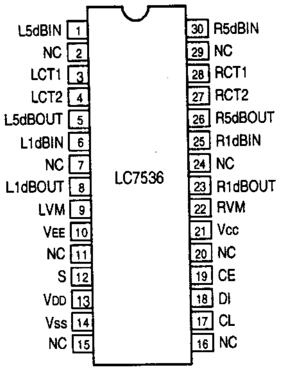

VREFL 33
RIN+ 32
RIN– 31
LIN+ 30
LIN– 29
ROUT1 28
LOUT1 27
ROUT2 26
LOUT2 25
ROUT3 24
LOUT3 23
VCOM 34
VREFH 35
AVDD 36
AVSS 37
XTI 38
XTO/MCKI 39
P/S 40
CS/DIF0 41
CCLK/DIF1 42
CDTI/LOOP0 43
CDTO/LOOP1 44
22 CAD0
21 CAD1
20 ICKS0
19 ICKS1
18 XTS
17 PD
16 DVSS
15 DVDD
14 MCKO
13 DEM0
12 DEM1
Top View
1 SDOS
2 OCKS
3 M/S
4 BICK
5 LRCK
6 SDTI1
7 SDTI2
8 SDTI3
9 SDTO
10 DAUX
11 DFS

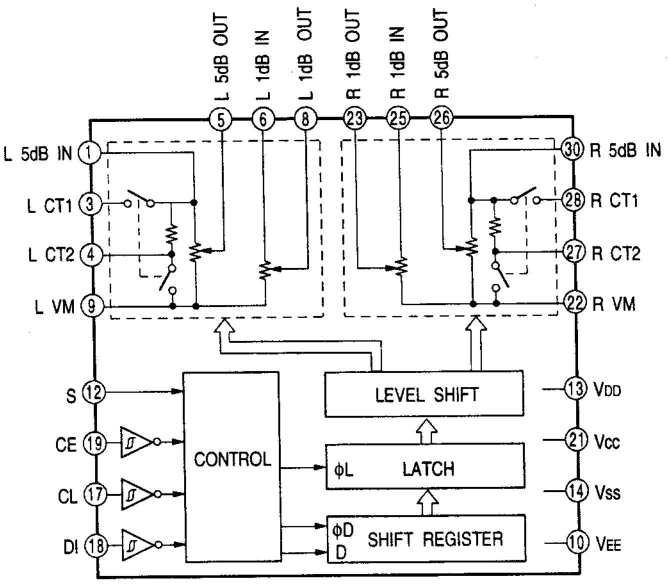
AK4526A Terminal Function

Pin No.	Name	I/O	Function
1	SDOS	I	SDTO Source select pin. "L": Internal ADC output, "H": DAUX input ORed with serial control register if P/S = "L".
2	OCKS	I	MCKO Clock frequency select pin. "L": MCLK, "H": MCLK/2, ORed with serial control register if P/S = "L".
3	M/S	I	Audio data master/slave mode select pin. "L": Slave mode, "H": Master mode.
4	BICK	I/O	Audio serial data clock pin.
5	LRCK	I/O	Input/Output channel clock pin.
6	SDTI1	I	DAC1 Audio serial data input pin.
7	SDTI2	I	DAC2 Audio serial data input pin.
8	SDTI3	I	DAC3 Audio serial data input pin.
9	SDTO	O	Audio serial data output pin.
10	DAUX	I	AUX Audio serial data input pin.
11	DFS	I	Double speed sampling mode pin. "L": Normal speed, "H": Double speed, the ADC is powered down. ORed with serial control register if P/S = "L".
12	DEM1	I	De-emphasis pin ORed with serial control register is P/S = "L".
13	DEM0	I	De-emphasis pin. ORed with serial control register if P/S = "L".
14	MCKO	O	Master clock output pin.
15	DVDD	—	Digital power supply pin.
16	DVss	—	Digital ground pin.
17	PD	I	Power-Down & reset pin. When "L", the AK4526A is powered-down and the control registers are reset to default state. If the state of P/S, M/S CAD0-1 changes, then the AK4526A must be reset by PD.
18	XTS	I	X'tal oscillator Select/Test mode pin. "H": X'tal oscillator selected, "L": External clock source selected.
19	ICKS1	I	Input clock select 1 pin.
20	ICKS0	I	Input clock select 0 pin.
21	CAD1	I	Chip address pin. Used during the serial control mode.
22	CAD0	I	Chip address pin. Used during the serial control mode.
23	LOUT3	O	Lch #3 analog output pin.
24	ROUT3	O	Rch #3 analog output pin.
25	LOUT2	O	Lch #2 analog output pin.
26	ROUT2	O	Rch #2 analog output pin.
27	LOUT1	O	Lch #1 analog output pin.
28	ROUT1	O	Rch #1 analog output pin.
29	LIN–	I	Lch Analog negative input pin.
30	LIN+	I	Lch analog positive input pin.
31	RIN–	I	Rch analog negative input pin.
32	RIN+	I	Rch analog positive input pin.
33	VREFL	I	Negative voltage reference input pin, AVss.
34	VCOM	O	Common voltage output pin, AVDD/2. Large external capacitor is used to reduce power-supply noise.
35	VREFH	I	Positive voltage reference input pin, AVDD.
36	AVDD	—	Analog power supply pin.
37	AVSS	—	Analog ground pin.
38	XTI	I	X'tal input pin.
39	XTO	O	X'tal output pin if XTS = "H".
	MCKI	I	External Master clock input pin if XTS = "L".
40	P/S	I	Parallel/Serial select pin. "L": Serial control mode, "H": Parallel control mode.
41	DIF0	I	Audio data interface format pin in parallel mode.
	CS	I	Chip select pin in serial mode.
42	DIFI	I	Audio data interface format pin in parallel mode.
	CCLK	I	Control data clock pin in serial mode.
43	LOOP0	I	Loopback mode pin in parallel mode. Enables digital loop-back from ADC to 3 DACs.
	CDTI	I	Control data input pin in serial mode.
44	LOOP1	I	Loopback mode pin in parallel mode. Enable all 3 DAC channels to be input from SDTI1.
	CDTO	O	Control data output pin in serial mode.

LC7536 (IC301 ~ 303)



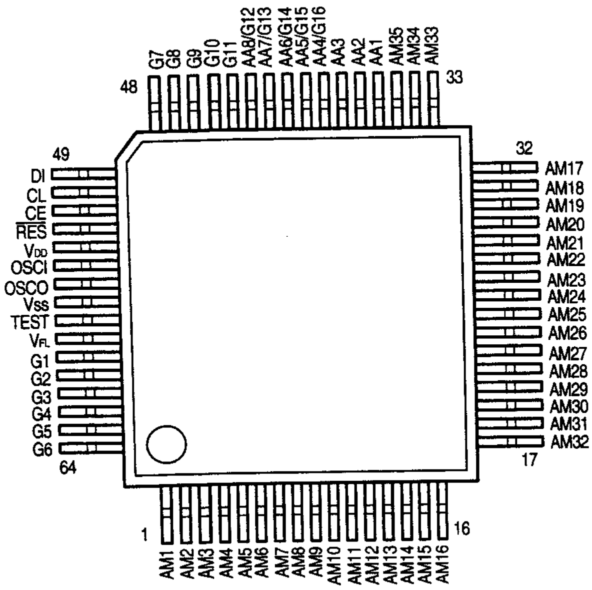

L5dBIN 1
NC 2
LCT1 3
LCT2 4
L5dBOUT 5
L1dBIN 6
NC 7
L1dBOUT 8
LVM 9
VEE 10
NC 11
S 12
VDD 13
Vss 14
NC 15
LC7536
30 R5dBIN
29 NC
28 RCT1
27 RCT2
26 R5dBOUT
25 R1dBIN
24 NC
23 R1dBOUT
22 RVM
21 Vcc
20 NC
19 CE
18 DI
17 CL
16 NC


L 5dB OUT
L 1dB IN
L 1dB OUT
R 1dB OUT
R 1dB IN
R 5dB OUT
5
6
8
23
25
26
L 5dB IN 1
L CT1 3
L CT2 4
L VM 9
30 R 5dB IN
28 R CT1
27 R CT2
22 R VM
S 12
CE 19
CL 17
DI 18
CONTROL
LEVEL SHIFT
ϕL LATCH
ϕD D SHIFT REGISTER
13 VDD
21 Vcc
14 Vss
10 VEE

LC7536 Terminal Function

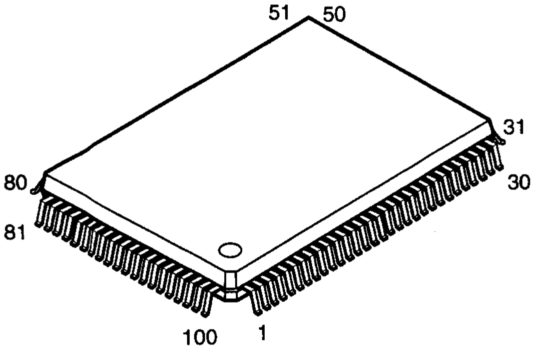
Pin No.	Symbol	I/O	Function
1	L 5dB IN	I	Input terminal for 5dB step attenuator, it should be driven with low impedance path.
2	NC	–	No connection.
3	L CT1	I	For loudness control, connect a capacitor between CT1 and 5dB IN with high frequency compensation, and also connect a capacitor between CT2 and Vm with low frequency compensation.
4	L CT2		
5	L 5dBOUT	O	Output terminal for 5dB step attenuator with approx. 1Mohm load impedance.
6	L 1dBIN	I	Input terminal for 1dB step attenuator, it should be driven with low impedance.
7	NC	–	No connection.
8	L 1dBOUT	O	Output terminal for 1dB step attenuator with approx. 47kohm ~ 1Mohm load impedance.
9	L VM		Common terminal for volume control.
10	VEE	I	Connect to power supply.
11	NC	–	No connection.
12	S		Selection terminal for address code during data format.
13	VDD	I	Connect to power supply (Pay attention to the rising time so that Vcc does rise up faster than VDD when the power turns).
14	Vss	I	Connect to power supply.
15	NC	–	No connection.
16	NC	–	No connection.
17	CL	I	Input terminal for controlling LC7536 serial data with 0 ~ 5V amplitude.
18	DI		
19	CE		
20	NC	–	No connection.
21	Vcc	I	Connect power supply (Pay attention to the rising time so that Vcc does not rise up faster than VDD when the power turns).
22	R VM		Common terminal for volume control.
23	R 1dBOUT	O	Output terminal for 1dB step attenuator with approx. 47kohm ~ 1Mohm load impedance.
24	NC	–	No connection.
25	R 1dBIN	I	Input terminal for 1dB step attenuator, it should be driven with low impedance.
26	R 5dBOUT	O	Output terminal for 5dB step attenuator with approx. 1Mohm load impedance.
27	R CT2	I	For loudness control, connect a capacitor between CT1 and 5dBIN with high frequency compensation, and also connect a capacitor between CT2 and Vm with low frequency compensation.
28	R CT1		
29	NC	–	No connection.
30	R 5dBIN	I	Input terminal for 5dB step attenuator, it should be driven with low impedance path.

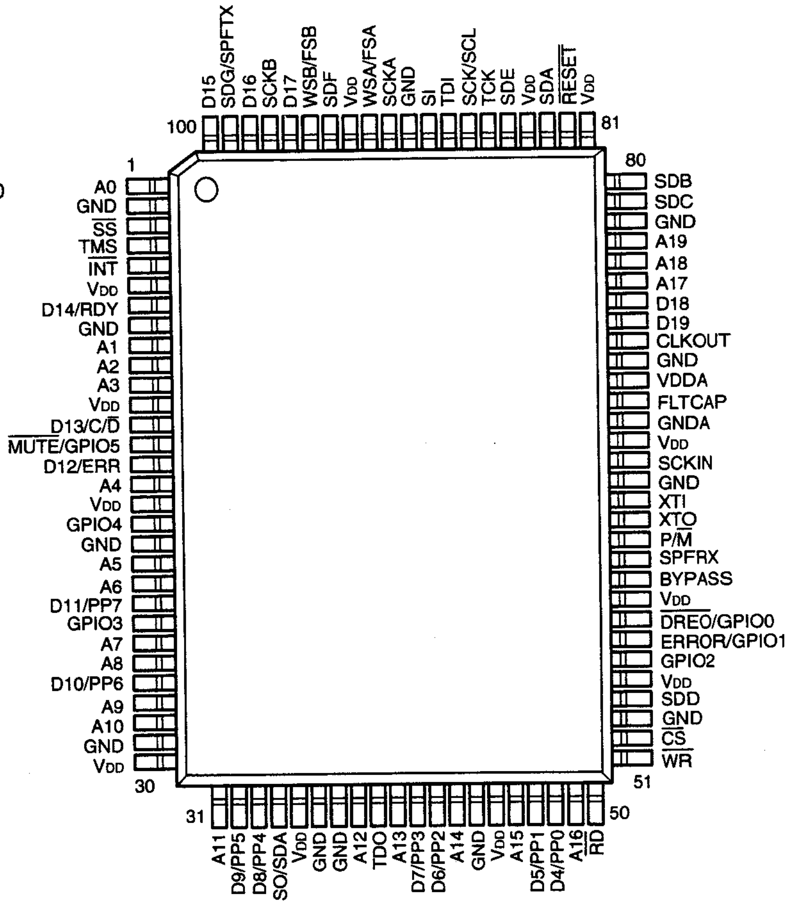
LC75721E (IC701)


G7
G8
G9
G10
G11
AA8/G12
AA7/G13
AA6/G14
AA5/G15
AA4/G16
AA3
AA2
AA1
AM35
AM34
AM33
48
33
49
DI
CL
CE
RES
VDD
OSCI
OSCO
Vss
TEST
VFL
G1
G2
G3
G4
G5
G6
64
32
AM17
AM18
AM19
AM20
AM21
AM22
AM23
AM24
AM25
AM26
AM27
AM28
AM29
AM30
AM31
AM32
17
1
16
AM1
AM2
AM3
AM4
AM5
AM6
AM7
AM8
AM9
AM10
AM11
AM12
AM13
AM14
AM15
AM16

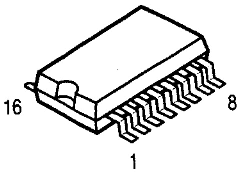
Symbol	Function
V_{DD}	Power terminal +5V
Vss	Power terminal GND
V_{FL}	Power terminal FL drive
DI CL CE	Serial data transfer terminal Cl: Data CL: Clock CE: Chip enable
OSCI OSCO	External CR connecting terminal
RES	System reset terminal
AM1~AM35 AA1~AA3	Anode output terminal
AA4/G16 AA5/G15 AA6/G14 AA7/G13 AA8/G12	Anode/Grid output terminal
G1~G11	Grid output terminal
TEST	LSI test terminal

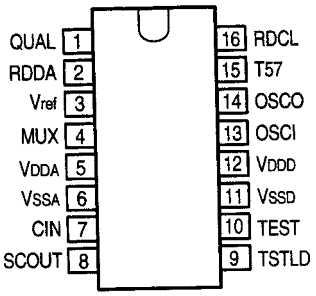
ZR38601 (IC221)


51
50
31
80
30
81
100
1


D15
SDG/SPFTX
D16
SCKB
D17
WSB/FSB
SDF
VDD
WSA/FSA
SCKA
GND
SI
TDI
SCK/SCL
TCK
SDE
VDD
SDA
RESET
VDD
100
81
1
A0
GND
SS
TMS
INT
VDD
D14/RDY
GND
A1
A2
A3
VDD
D13/C/D
MUTE/GPIO5
D12/ERR
A4
VDD
GPIO4
GND
A5
A6
D11/PP7
GPIO3
A7
A8
D10/PP6
A9
A10
GND
VDD
30
80
SDB
SDC
GND
A19
A18
A17
D18
D19
CLKOUT
GND
VDDA
FLTCAP
GNDA
VDD
SCKIN
GND
XTI
XTO
P/M
SPFRX
BYPASS
VDD
DREO/GPIO0
ERROR/GPIO1
GPIO2
VDD
SDD
GND
CS
WR
51
31
50
A11
D9/PP5
D8/PP4
SO/SDA
VDD
GND
GND
A12
TDO
A13
D7/PP3
D6/PP2
A14
GND
VDD
A15
D5/PP1
D4/PP0
A16
RD

SAA6579T (IC091)

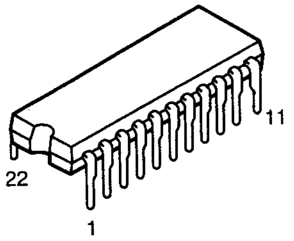


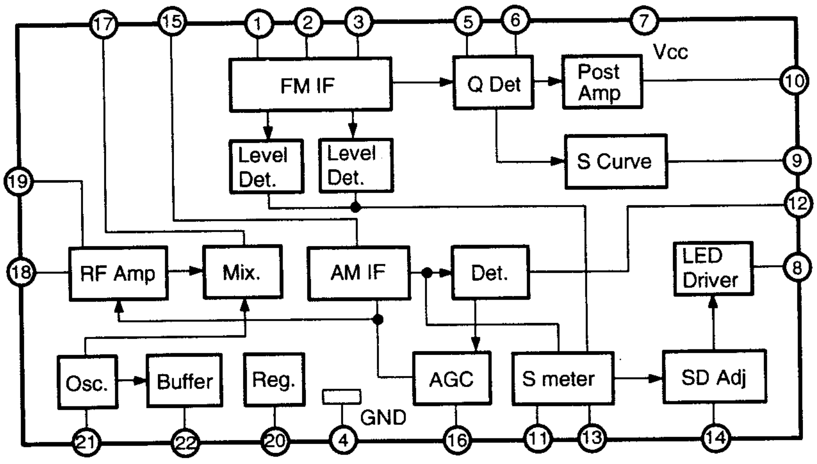

QUAL 1
RDDA 2
Vref 3
MUX 4
VDDA 5
VSSA 6
CIN 7
SCOUT 8
16 RDCL
15 T57
14 OSCO
13 OSCI
12 VDDD
11 VSSD
10 TEST
9 TSTLD

SAA6579T Terminal Function

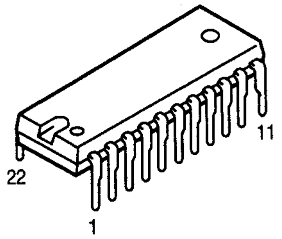
Pin No.	Symbol	Function
1	QUAL	Quality indication output.
2	RDDA	RDS data output.
3	Vref	Reference voltage output (0.5 VDDA).
4	MUX	Multiplex signal input.
5	VDDA	+5V supply voltage for analog part.
6	VSSA	Ground for analog part (0V).
7	CIN	Subcarrier input to comparator.
8	SCOUT	Subcarrier output of reconstruction filter.
9	MODE	Oscillation mode/test control input.
10	TEST	Test enable input.
11	VSSD	Ground for digital part (0V).
12	VDDD	+5V supply voltage for digital part.
13	OSCI	Oscillator input.
14	OSCO	Oscillator output.
15	T57	57 kHz clock signal output.
16	RDCL	RDS clock output.

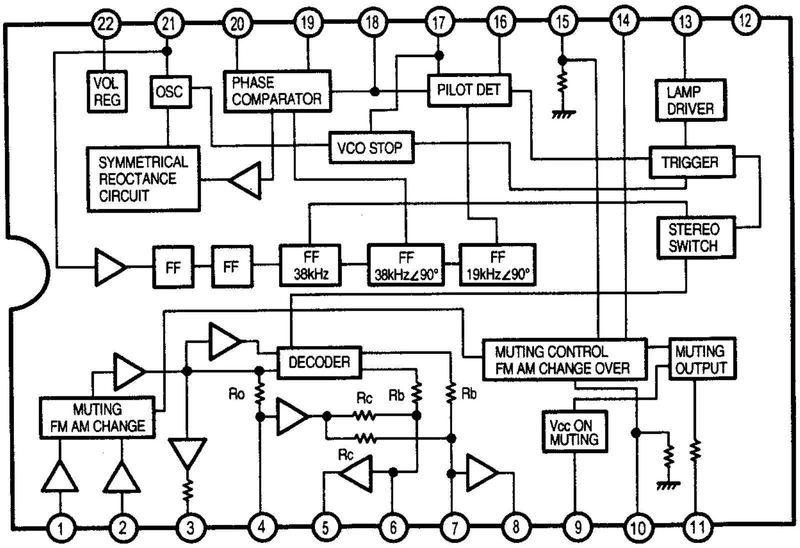
LA1265 (S) (IC001)



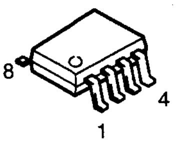

FM IF
Q Det
Post Amp
Vcc
Level Det.
Level Det.
S Curve
RF Amp
Mix.
AM IF
Det.
LED Driver
Osc.
Buffer
Reg.
AGC
S meter
SD Adj
GND
17
15
1
2
3
5
6
7
10
9
12
19
18
8
21
22
20
4
16
11
13
14

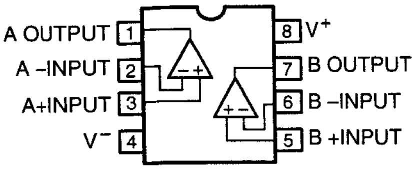
LA3401 (IC002)



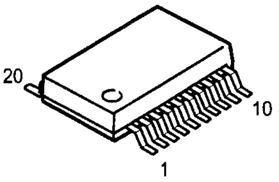

22
21
20
19
18
17
16
15
14
13
12
VOL REG
OSC
PHASE COMPARATOR
PILOT DET
LAMP DRIVER
VCO STOP
SYMMETRICAL REOCTANCE CIRCUIT
TRIGGER
STEREO SWITCH
FF
FF
FF 38kHz
FF 38kHz∠90°
FF 19kHz∠90°
DECODER
MUTING CONTROL FM AM CHANGE OVER
MUTING OUTPUT
MUTING FM AM CHANGE
Ro
Rc
Rb
Rb
Rc
Vcc ON MUTING
1
2
3
4
5
6
7
8
9
10
11

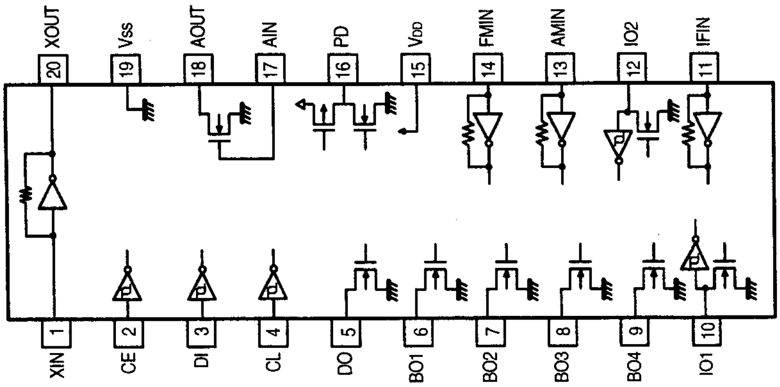
BA4558F
(IC101, 151~154)
BA15218F
(IC241~244, 304~309, 451, 752)



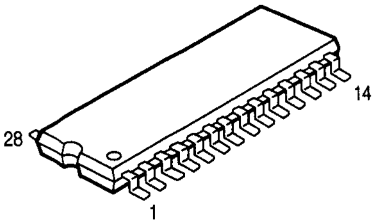

A OUTPUT 1
A -INPUT 2
A+INPUT 3
V⁻ 4
8 V⁺
7 B OUTPUT
6 B -INPUT
5 B +INPUT

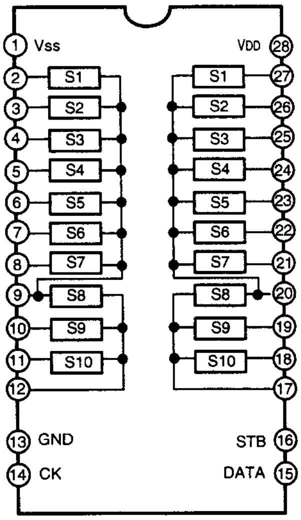
LC72131M (IC003)




XOUT 20
Vss 19
AOUT 18
AIN 17
PD 16
VDD 15
FMIN 14
AMIN 13
IO2 12
IFIN 11
XIN 1
CE 2
DI 3
CL 4
DO 5
BO1 6
BO2 7
BO3 8
BO4 9
IO1 10

TC9273F-007 (IC102)

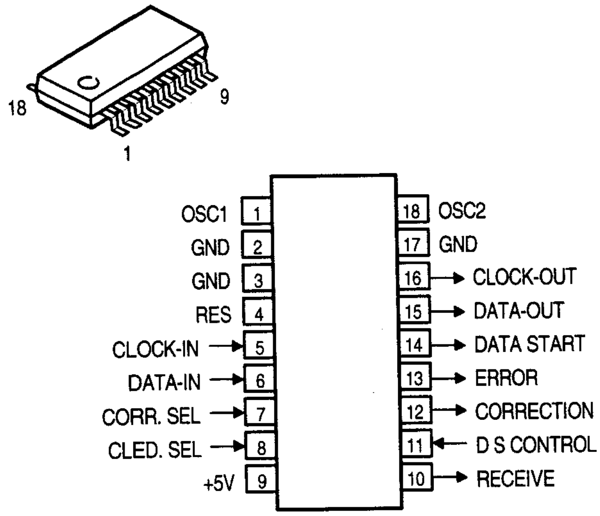



1 Vss
VDD 28
2 S1
3 S2
4 S3
5 S4
6 S5
7 S6
8 S7
9 S8
10 S9
11 S10
12
S1 27
S2 26
S3 25
S4 24
S5 23
S6 22
S7 21
S8 20
S9 19
S10 18
17
13 GND
STB 16
14 CK
DATA 15

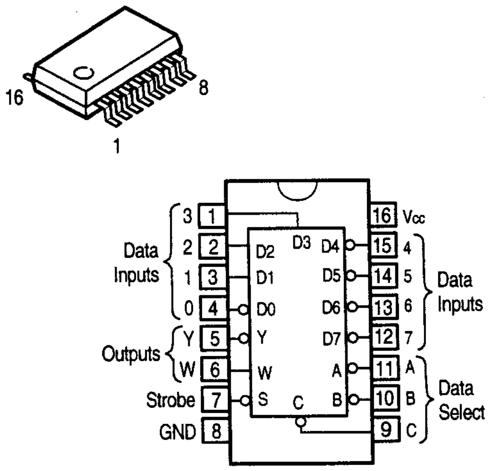
TC9273F Terminal Function

Pin No.	Symbol	Name	Function	Note
1	Vss	-Power Terminal	Dual Power Use: VDD = 8.0~17V GND = 0V Vss = –8.0~17V Single Power Use: VDD = 8.0~18V Vss = GND = 0V	—
13	GND	Digital Ground		
28	VDD	+Power Terminal		
2~12 17~27	S1~11	I/O Terminal	Input terminal of analog switch.	—
14	CK	Clock Input	Clock input for data transfer.	Low level BorderInput Terminal
15	DATA	Data Input	Serial input for switch setting.	
16	STB	Strobe Input	Strobe input for data writing.	

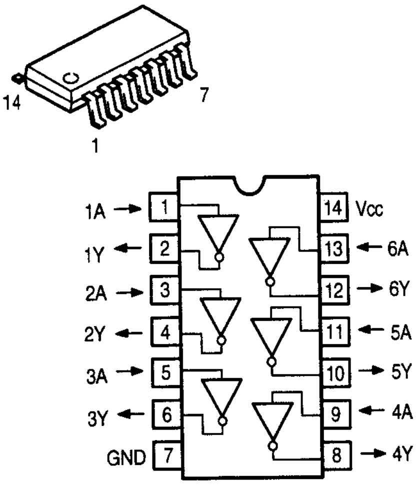
LC7074M (IC092)


18
9
1
OSC1 1
GND 2
GND 3
RES 4
CLOCK-IN 5
DATA-IN 6
CORR. SEL 7
CLED. SEL 8
+5V 9
18 OSC2
17 GND
16 CLOCK-OUT
15 DATA-OUT
14 DATA START
13 ERROR
12 CORRECTION
11 D S CONTROL
10 RECEIVE

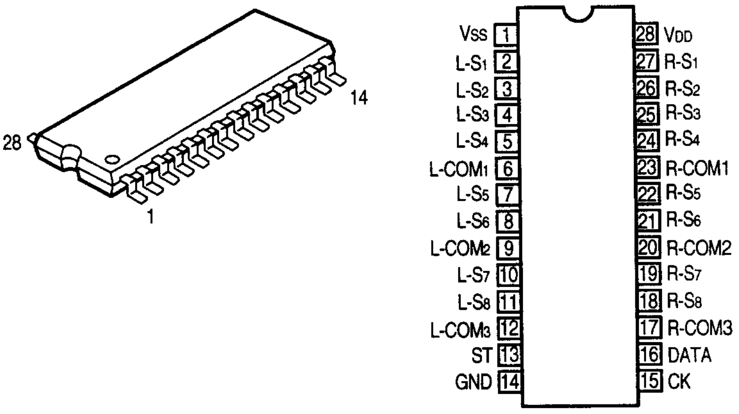
TC74HC151AF (IC204)

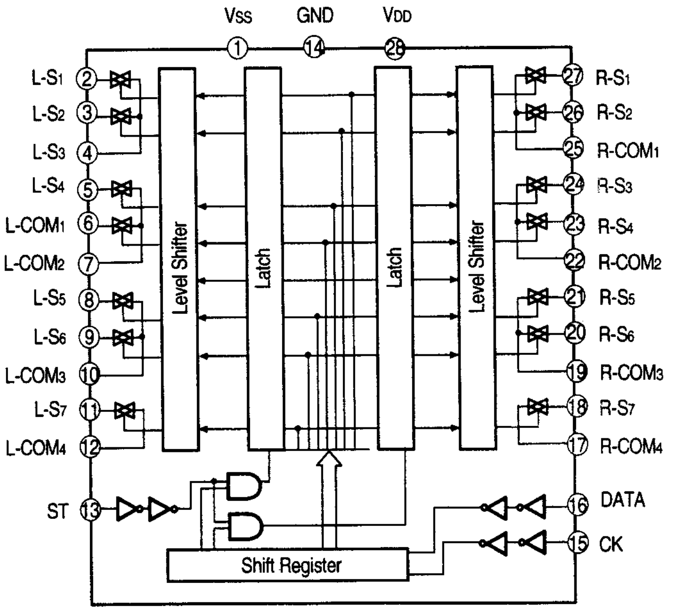

16
8
1
Data Inputs
3 1
2 2
1 3
0 4
Outputs
Y 5
W 6
Strobe 7
GND 8
D2
D1
D0
Y
W
S
C
D3
D4
D5
D6
D7
A
B
16 Vcc
15 4
14 5
13 6
12 7
11 A
10 B
9 C
Data Inputs
Data Select

TC74HCU04AF (IC202)
TC74HCT04AF (IC223, 224)

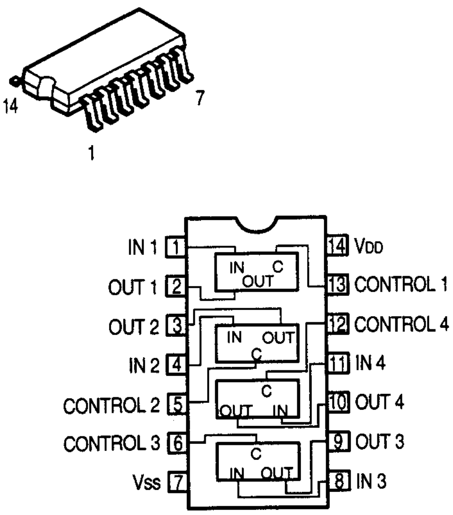

14
7
1
1A 1
1Y 2
2A 3
2Y 4
3A 5
3Y 6
GND 7
14 Vcc
13 6A
12 6Y
11 5A
10 5Y
9 4A
8 4Y

TC9164AF (IC951)

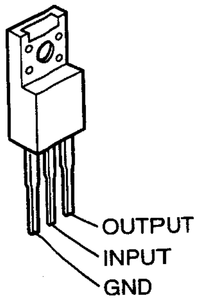

28
14
1
Vss 1
L-S1 2
L-S2 3
L-S3 4
L-S4 5
L-COM1 6
L-S5 7
L-S6 8
L-COM2 9
L-S7 10
L-S8 11
L-COM3 12
ST 13
GND 14
28 VDD
27 R-S1
26 R-S2
25 R-S3
24 R-S4
23 R-COM1
22 R-S5
21 R-S6
20 R-COM2
19 R-S7
18 R-S8
17 R-COM3
16 DATA
15 CK


Vss
GND
VDD
①
⑭
㉘
L-S1 ②
L-S2 ③
L-S3 ④
L-S4 ⑤
L-COM1 ⑥
L-COM2 ⑦
L-S5 ⑧
L-S6 ⑨
L-COM3 ⑩
L-S7 ⑪
L-COM4 ⑫
ST ⑬
Level Shifter
Latch
Latch
Level Shifter
Shift Register
㉗ R-S1
㉖ R-S2
㉕ R-COM1
㉔ R-S3
㉓ R-S4
㉒ R-COM2
㉑ R-S5
⑳ R-S6
⑲ R-COM3
⑱ R-S7
⑰ R-COM4
⑯ DATA
⑮ CK

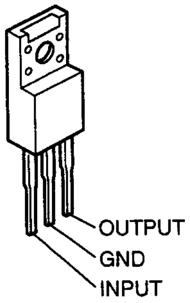
BU4066BCF (IC751)


14
7
1
IN 1 1
OUT 1 2
OUT 2 3
IN 2 4
CONTROL 2 5
CONTROL 3 6
Vss 7
14 VDD
13 CONTROL 1
12 CONTROL 4
11 IN 4
10 OUT 4
9 OUT 3
8 IN 3
IN
OUT
C

KIA7912PI (IC805)

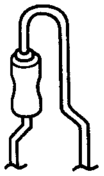

OUTPUT
INPUT
GND

BA033T (IC222)
KIA7812PI (IC804)
KIA7805PI (IC802)
KIA7806PI (IC803)
KIA7809PI (IC004)


OUTPUT
GND
INPUT

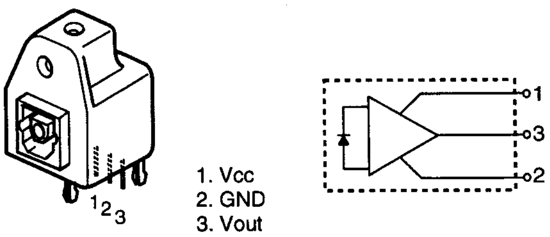
● IC PROTECTOR

1A (ICP901, 902)



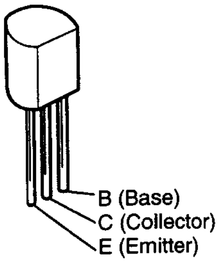
● OPTICAL

INPUT GP1F37R (IC201)

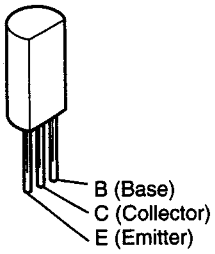

1
2
3
1. Vcc
2. GND
3. Vout
1
3
2

● TRANSISTORS

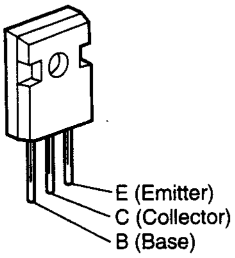
2SA970 (BL)
2SA988 (E/F)
2SC1815 (GR)
2SC1841 (E/F)
2SC2878 (A/B)


B (Base)
C (Collector)
E (Emitter)

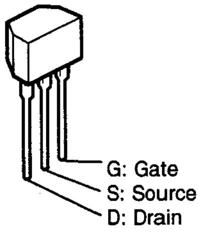
2SB647A (C)
2SD667A (C)


B (Base)
C (Collector)
E (Emitter)

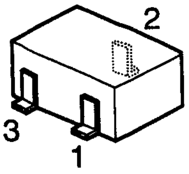
2SA1633 (E/F)
2SC4278 (E/F)


E (Emitter)
C (Collector)
B (Base)

2SK161

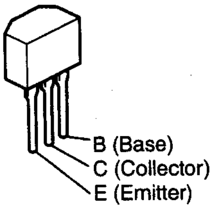

G: Gate
S: Source
D: Drain

2SB709A
2SD601A



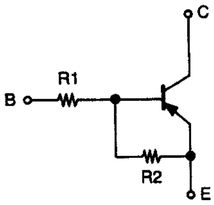
1: Emitter
2: Base
3: Collector

DTA114ES
DTA114TS
DTC144TS
DTC323TS


B (Base)
C (Collector)
E (Emitter)

DTA114ES
DTA114TS

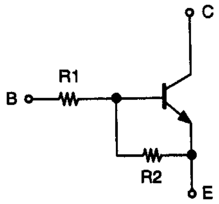
PNP Type



	R1	R2
DTA114ES	10 kohm	10 kohm
DTA114TS	10 kohm	—

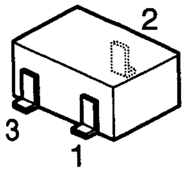
DTC144TS
DTC323TS

NPN Type



	R1	R2
DTC144TS	47 kohm	—
DTC323TS	2.2 kohm	—

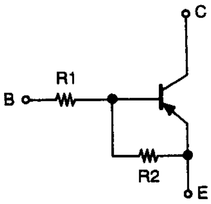
UN2111
UN2113
UN211L
UN2211
UN2213



1: GND/Emitter
2: Out/Collector
3: In/Base

UN2111
UN2113
UN211L

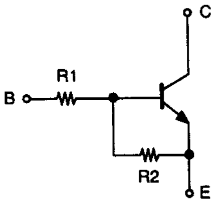
PNP Type



	R1	R2
UN2111	10 kohm	10 kohm
UN2113	47 kohm	47 kohm
UN211L	4.7 kohm	4.7 kohm

UN2211
UN2213

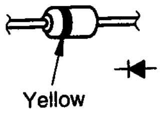
NPN Type



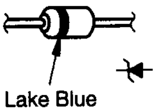
	R1	R2
UN2211	10 kohm	10 kohm
UN2213	47 kohm	47 kohm

• DIODES

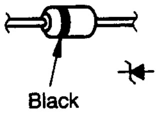
1SS133



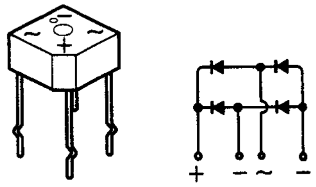
HZS6C-2
HZS33-2



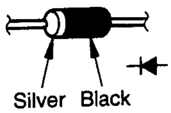
MTZJ3.3A
MTZJ7.5A
MTZJ9.1A



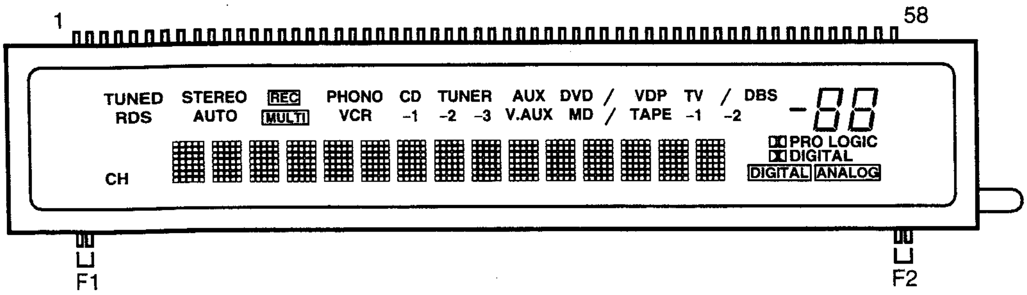
S4VB20

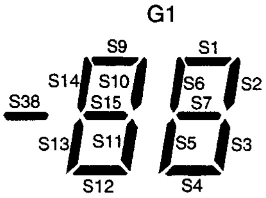


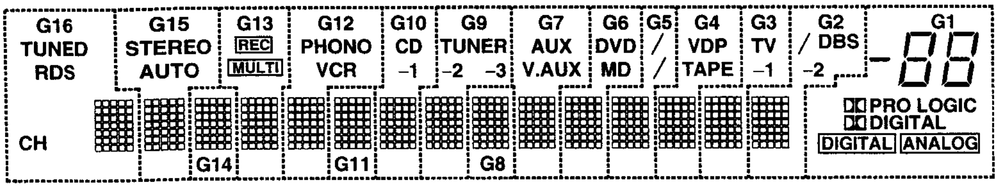
1N4001


Silver
Black

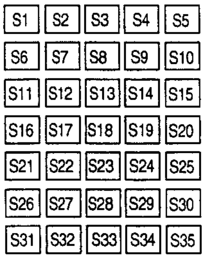
FL DISPLAY CM1690C (FL701)


1
58
TUNED
RDS
STEREO
AUTO
REC
MULTI
PHONO
VCR
CD
-1
TUNER
-2
-3
AUX
V.AUX
DVD
MD
/
/
VDP
TAPE
TV
-1
/
DBS
-2
CH
PRO LOGIC
DIGITAL
DIGITAL
ANALOG
F1
F2


G1
S9
S1
S14
S10
S6
S2
S38
S15
S7
S13
S11
S5
S3
S12
S4


G16
TUNED
RDS
CH
G15
STEREO
AUTO
G13
REC
MULTI
G12
PHONO
VCR
G10
CD
-1
G9
TUNER
-2
-3
G7
AUX
V.AUX
G6
DVD
MD
G5
/
/
G4
VDP
TAPE
G3
TV
-1
G2
/ DBS
-2
G1
PRO LOGIC
DIGITAL
DIGITAL
ANALOG
G14
G11
G8

G2~G16



S1	S2	S3	S4	S5
S6	S7	S8	S9	S10
S11	S12	S13	S14	S15
S16	S17	S18	S19	S20
S21	S22	S23	S24	S25
S26	S27	S28	S29	S30
S31	S32	S33	S34	S35

Pin Assignment

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CONNECTION	F1	F1	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18
PIN NO.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CONNECTION	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33	S34	S35	S36	S37	S38
PIN NO.	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58		
CONNECTION	G16	G15	G14	G13	G12	G11	G10	G9	G8	G7	G6	G5	G4	G3	G2	G1	F2	F2		

F1,F2 : Filament
G1~G16 : Grid
S1~S38 : Anode

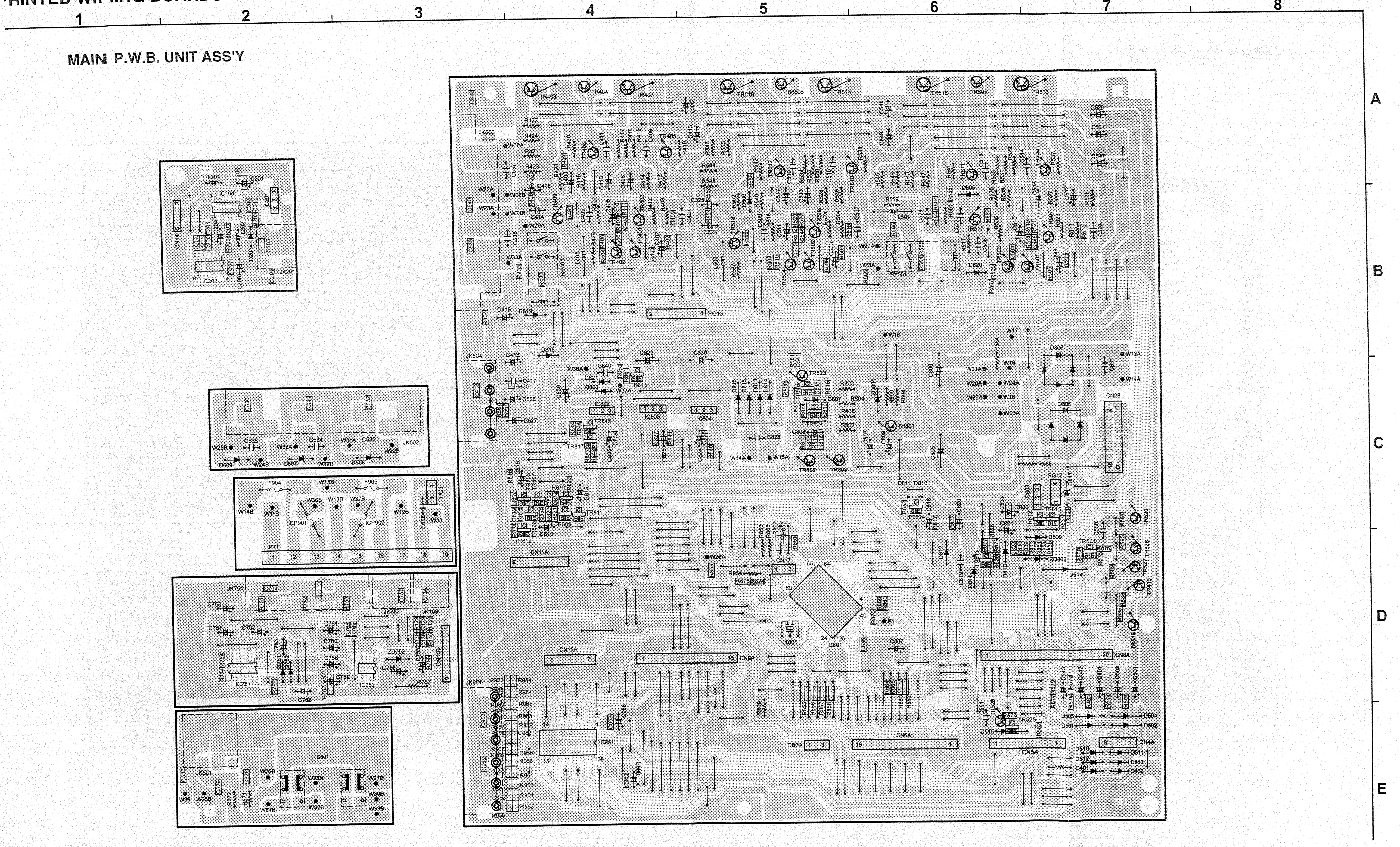
Anode & Grid Assignment

	G1	G2~G16		G1	G2~G16		G1	G2~G16		G1	G2~G16
S1	S1	S1	S10	S10	S10	S19	——	S19	S28	——	S28
S2	S2	S2	S11	S11	S11	S20	——	S20	S29	——	S29
S3	S3	S3	S12	S12	S12	S21	——	S21	S30	——	S30
S4	S4	S4	S13	S13	S13	S22	——	S22	S31	——	S31
S5	S5	S5	S14	S14	S14	S23	——	S23	S32	——	S32
S6	S6	S6	S15	S15	S15	S24	——	S24	S33	——	S33
S7	S7	S7	S16	——	S16	S25	——	S25	S34	——	S34
S8		S8	S17	DIGITAL	S17	S26	——	S26	S35	——	S35
S9	S9	S9	S18	PRO LOGIC	S18	S27	——	S27			

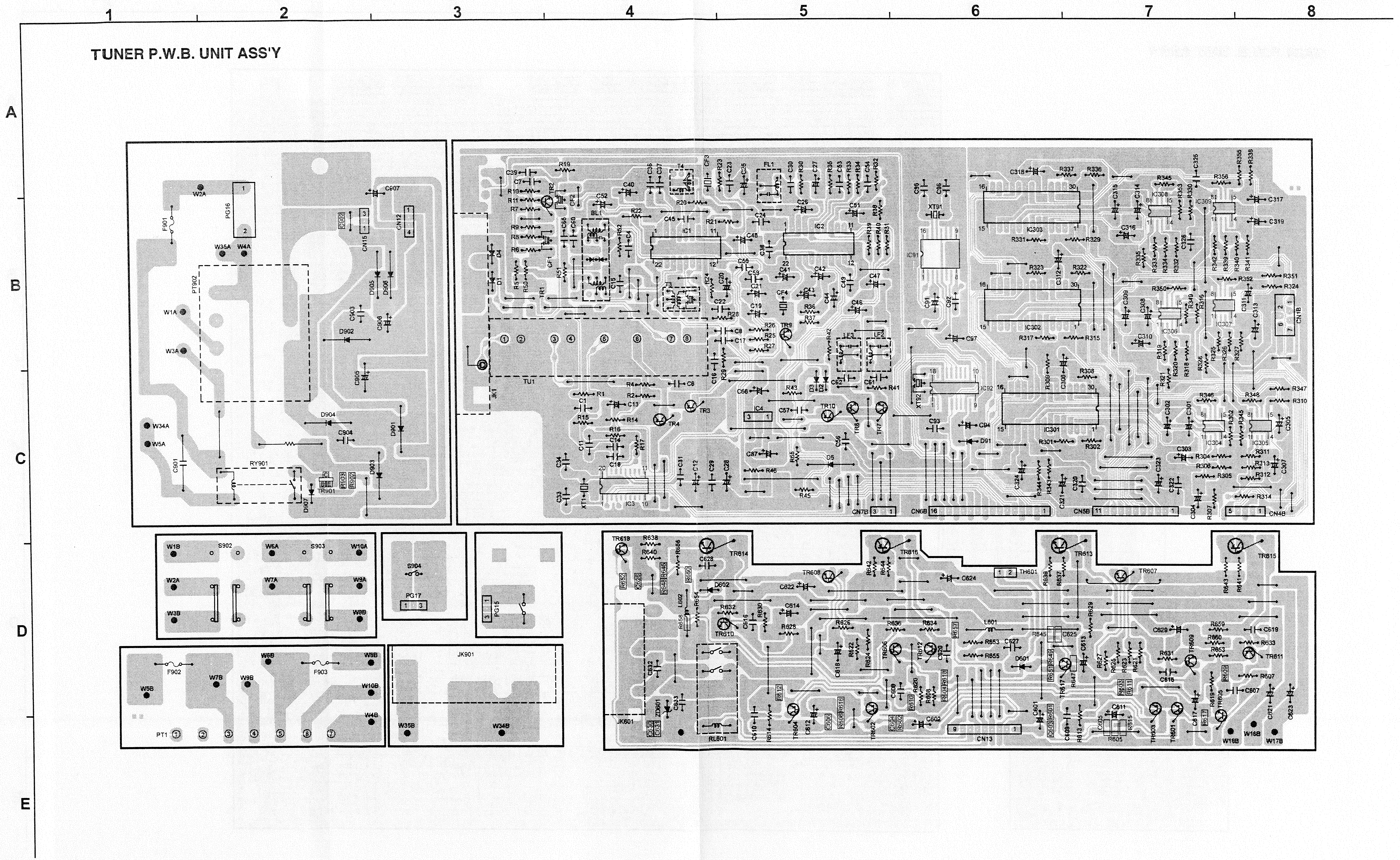
	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14	G15	G16
S36	DIGITAL	/	TV	VDP	/(DVD)	DVD	AUX	——	TUNER	CD	——	PHONO	REC	——	STEREO	TUNED
S37	ANALOG	-2	-1	TAPE	/(MD)	MD	V.MAX	——	-2	-1	——	VCR	MULTI	——	AUTO	RDS
S38	S38	DBS	——	——	——	——	——	——	-3	——	——	——	——	——	——	CH

PRINTED WIRING BOARDS

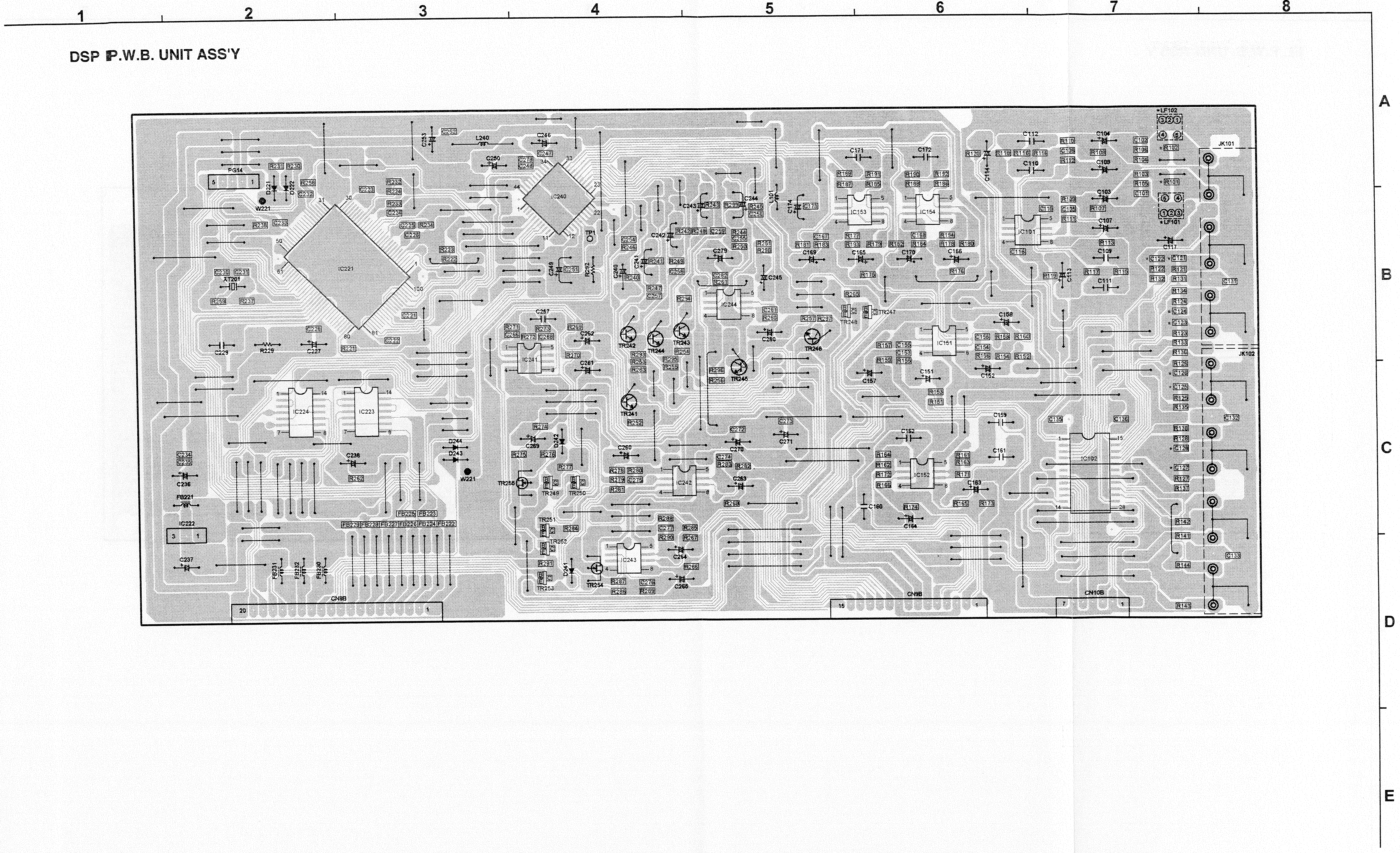
MAIN P.W.B. UNIT ASS'Y


1
2
3
4
5
6
7
8
A
B
C
D
E
JK503
JK504
JK502
JK751
JK752
JK103
JK501
JK951
RY401
RY501
PG13
PG12
CN14
CN11A
CN11B
CN10A
CN9A
CN8A
CN7A
CN6A
CN5A
CN4A
CN2B
CN17
IC201
IC202
IC204
IC751
IC752
IC802
IC803
IC804
IC805
IC951
IC801
X801
P1
PT1
F904
F905
ICP901
ICP902
S501
TR408
TR404
TR407
TR518
TR506
TR514
TR515
TR505
TR513
D805
D806
L501
L201

TUNER P.W.B. UNIT ASS'Y


1
2
3
4
5
6
7
8
A
B
C
D
E
W2A
PG16
F901
W35A
W4A
PT902
W1A
W3A
C907
CN12
CN15
D905
D906
C903
C906
D902
C905
D904
C904
D901
W34A
W5A
C601
RY901
D903
D907
TR901
R903
JK1
TU1
D4
D1
TR1
TR2
CF1
CF2
BL1
IC1
IC2
IC3
IC4
FL1
T4
XT1
XT91
XT92
IC91
IC92
TR3
TR4
TR5
TR6
TR7
TR8
TR9
TR10
LF1
LF2
D3
D5
D91
IC301
IC302
IC303
IC304
IC305
IC306
IC307
IC308
IC309
CN1B
CN7B
CN6B
CN5B
CN4B
W1B
S902
W6A
S903
W10A
W2A
W7A
W9A
W3B
W8B
S904
PG17
PG15
W6B
W8B
F902
F903
W5B
W7B
W9B
W10B
W4B
PT1
JK901
W35B
W34B
TR619
R638
R640
R656
C628
TR614
TR616
TR608
C622
D602
L602
R632
R630
C614
TR610
R626
R625
R636
R634
L601
C624
TH601
TR613
TR607
TR615
R629
C629
R659
C619
R633
TR611
TR609
R631
C616
R607
C607
R605
C617
TR601
TR603
C611
C605
R615
CN13
C601
R613
D601
R653
C627
R655
C625
R645
R647
R617
C632
C633
ZD601
JK601
RL601
C610
R614
TR604
C612
TR602
C608
C620
R608
R620
TR606
TR612
C602
W16B
W17B
W16B

DSP P.W.B. UNIT ASS'Y


1
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5
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C
D
E
IC221
IC240
IC241
IC242
IC243
IC244
IC224
IC223
IC222
IC153
IC154
IC101
IC151
IC152
IC102
PG14
XT201
W221
TP1
FB221
FB222
FB223
FB224
FB225
FB226
FB227
FB228
FB229
FB230
FB231
FB232
L240
L101
D221
D222
D241
D242
D243
D244
TR241
TR242
TR243
TR244
TR245
TR246
TR247
TR248
TR249
TR250
TR251
TR252
TR253
TR254
TR255
LF101
LF102
JK101
JK102
CN8B
CN9B
CN10B
20
15
7
1

1 2 3 4 5 6 7 8

A

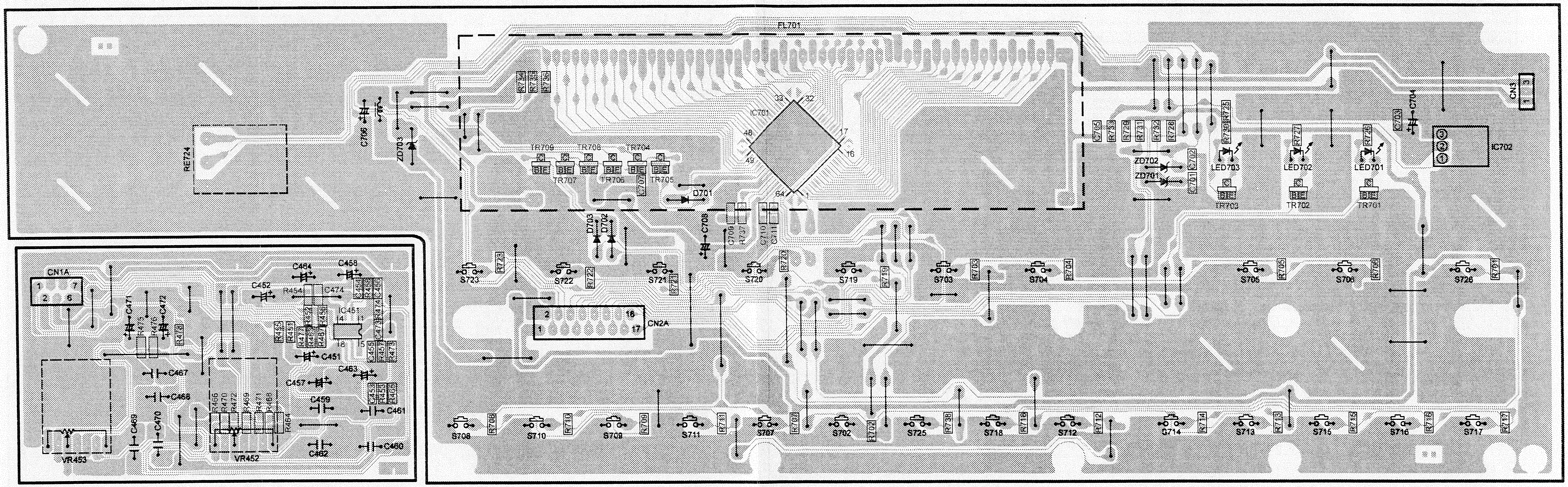
B

C

D

E

FL P.W.B. UNIT ASS'Y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IC701
IC702
CN3
CN1A
CN2A
RE724
C706
ZD703
TR709
TR708
TR704
TR707
TR706
TR705
D701
D703
D702
C708
C709
C710
C711
ZD702
ZD701
LED703
LED702
LED701
TR703
TR702
TR701
C704
S723
S722
S721
S720
S719
S703
S704
S705
S706
S726
S708
S710
S709
S711
S707
S702
S725
S718
S712
S714
S713
S715
S716
S717
C464
C458
C452
C474
IC451
C471
C472
R475
R476
R478
C451
C467
C463
C457
C468
C459
C469
C470
C461
C462
C460
VR453
VR452

NOTE FOR PARTS LIST

- Part indicated with the mark "⊙" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:

Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

● Resistors

Ex.: RN 14K 2E 182 G FR
RN: Type
14K: Shape and performance
2E: Power
182: Resistance
G: Allowable error
FR: Others

Type	Power	Allowable error	Others
RD : Carbon RC : Composition RS : Metal oxide film RW : Winding RN : Metal film RK : Metal mixture	2B : 1/8W 2E : 1/4W 2H : 1/2W 3A : 1W 3D : 2W 3F : 3W 3H : 5W	F : ±1% G : ±2% J : ±5% K : ±10% M : ±20%	P : Pulse-resistant type NL : Low noise type NB : Non-burning type FR : Fuse-resistor F : Lead wire forming

*** Resistance**

1 8 2 ⇒ 1800 ohm = 1.8 kohm
2 — Indicates number of zeros after effective number.
1 8 — 2-digit effective number.

- Units: ohm

1 R 2 ⇒ 1.2 ohm
2 — 1-digit effective number.
1 R — 2-digit effective number, decimal point indicated by R.

- Units: ohm

● Capacitors

Ex.: CE 04W 1H 2R2 M BP
CE: Type
04W: Shape and performance
1H: Dielectric strength
2R2: Capacity
M: Allowable error
BP: Others

Type	Dielectric strength	Allowable error	Others
CE : Aluminum foil electrolytic CA : Aluminum solid electrolytic CS : Tantalum electrolytic CQ : Film CK : Ceramic CC : Ceramic CP : Oil CM : Mica CF : Metallized CH : Metallized	0J : 6.3V 1A : 10V 1C : 16V 1E : 25V 1V : 35V 1H : 50V 2A : 100V 2B : 125V 2C : 160V 2D : 200V 2E : 250V 2H : 500V 2J : 630V	F : ±1% G : ±2% J : ±5% K : ±10% M : ±20% Z : +80% −20% P : +100% −0% C : ±0.25pF D : ±0.5pF = : Others	HS : High stability type BP : Non-polar type HR : Ripple-resistant type DL : For change and discharge HF : For assuring high frequency U : UL part C : CSA part W : UL-CSA type F : Lead wire forming

*** Capacity (electrolyte only)**

2 2 2 ⇒ 2200µF
2 — Indicates number of zeros after effective number.
2 2 — 2-digit effective number.

- Units: µF.

2 R 2 ⇒ 2.2µF
2 — 1-digit effective number.
2 R — 2-digit effective number, decimal point indicated by R.

- Units: µF.

*** Capacity (except electrolyte)**

2 2 2 ⇒ 2200pF=0.0022µF
2 —(More than 2)— Indicates number of zeros after effective number.
2 2 — 2-digit effective number.

- Units: µF.

2 2 1 ⇒ 220pF
1 —(0 or 1)— Indicates number of zeros after effective number.
2 2 — 2-digit effective number.

- Units: pF.

- When the dielectric strength is indicated in AC, "AC" is included after the dieelectric strength value.

PARTS LIST OF P.W.B. UNIT

MAIN P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC201	269 0172 003	Optical digital input (GP1F37R)	
IC202	9LC K077 81R	IC TC74HCU04AF	
IC204	262 2213 901	IC TC74HC151AF	
IC751	262 1875 007	IC BU4066BCF	
IC752	9LC K150 81R	IC BA15218F	
IC801	9LC K321 12	IC TMP87CS71AF	
IC802	9LC P024 11	IC KIA7805PI	
IC803	9LC P024 12	IC KIA7806PI	
IC804	9LC P024 16	IC KIA7812PI	
IC805	9LC P055 42	IC KIA7912PI	
IC951	9LC K320 21R	IC TC9164AF	
TR401,402	271 0094 016	Transistor 2SA970(BL)	
TR403	273 0235 020	Transistor 2SC1841(F/E)	
TR404	273 0198 028	Transistor 2SC1815(GR)	
TR405	274 0060 007	Transistor 2SD667A(C)	
TR406	272 0053 005	Transistor 2SB647A(C)	
TR409	273 0235 020	Transistor 2SC1841(F/E)	
TR410	273 0253 015	Transistor 2SC2878(A/B)	
TR501~504	271 0094 016	Transistor 2SA970(BL)	
TR505,506	273 0198 028	Transistor 2SC1815(GR)	
TR507,508	273 0235 020	Transistor 2SC1841(F/E)	
TR509,510	274 0060 007	Transistor 2SD667A(C)	
TR511,512	272 0053 005	Transistor 2SB647A(C)	
TR517,518	273 0235 020	Transistor 2SC1841(F/E)	
TR519,520	273 0253 015	Transistor 2SC2878(A/B)	
TR521	269 0132 904	Transistor UN2111	
TR523	271 0131 021	Transistor 2SA988(F/E)	
TR525	269 0132 904	Transistor UN2111	
TR526~528	273 0253 015	Transistor 2SC2878(A/B)	
TR801	272 0053 005	Transistor 2SB647(C)	
TR802,803	269 0132 904	Transistor 2SA988(F/E)	
TR804	274 0163 904	Transistor 2SD601A	
TR805	272 0125 904	Transistor 2SB709A	
TR806~809	274 0163 904	Transistor 2SD601A	
TR810	272 0125 904	Transistor 2SB709A	
TR811	274 0163 904	Transistor 2SD601A	
TR812	9LC A011 31R	Transistor UN211L	
TR813	274 0163 904	Transistor 2SD601A	
TR814	269 0132 904	Transistor UN2111	
TR815~819	274 0163 904	Transistor 2SD601A	
D201	9L2 3989 21T	Diode 1SS133	
D202,203	9LC C000 03R	Diode 1SS355	
D401~403	9L2 3989 21T	Diode 1SS133	

Ref. No.	Part No.	Part Name	Remarks
D501~506	9L2 3989 21T	Diode 1SS133	
D510~516	9L2 3989 21T	Diode 1SS133	
D751,752	9L2 3989 21T	Diode 1SS133	
D805,806	276 0305 001	Diode S4VB20	
D807	9L2 3989 21T	Diode 1SS133	
D809,810	9L2 3989 21T	Diode 1SS133	
D811	9L2 3980 62T	Diode 1N4001	
D812	9L2 3989 21T	Diode 1SS133	
D813~816	9L2 3980 62T	Diode 1N4001	
D818~820	9L2 3989 21T	Diode 1SS133	
D821,822	9L2 3980 62T	Diode 1N4001	
D507~509	276 0463 914	Zener diode HZS6C-2	
ZD752	276 0463 914	Zener diode HZS6C-2	
ZD801	276 0484 919	Zener diode HZS33-2	
ZD802	276 0634 905	Zener diode MTZJ3.3A	
D817	276 0644 911	Zener diode MTZJ7.5A	
⚠ICP901	9LF N002 57M	Protector 1A	
⚠ICP902	9LF N002 57M	Protector 1A	
RESISTORS GROUP			
R129,130		Carbon chip 1Mohm 1/32W	RMC73M-1F105JR
R139,140		Carbon Chip 470ohm 1/32W	RMC73M-1F471JR
R201		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R202		Carbon chip 75ohm 1/32W	RMC73M-1F750JR
R203		Carbon Chip 100ohm 1/32W	RMC73M-1F101JR
R204		Carbon chip 2.2kohm 1/32W	RMC73M-1F222JR
R205		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
R401		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R402		Carbon chip 27kohm 1/32W	RMC73M-1F273JR
R403		Carbon Chip 220ohm 1/32W	RMC73M-1F221JR
R404		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R405		Carbon chip 470kohm 1/32W	RMC73M-1F474JR
R406		Carbon film 33kohm 1/16W	RD14S1J333JB
R407		Carbon chip 33kohm 1/32W	RMC73M-1F333JR
⚠R408	9LA T037 01R	Fusible 1.5kohm 1/4W(FR)	RN45B2E152JB-FR
R409		Carbon Chip 330ohm 1/32W	RMC73M-1F331JR
R410		Carbon chip 1.6kohm 1/32W	RMC73M-1F162JR
R411		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
⚠R412	9LA T037 02R	Fusible 47ohm 1/4W(FR)	RN45B2E470JB-FR
R413,414	9LA T011 29R	Metal oxide 5.6kohm 1W	RE562J0001ST
R415		Carbon film 30kohm 1/16W	RD14S1J303JB
R416		Carbon film 1.2kohm 1/16W	RD14S1J122JB
R417		Carbon film 1.3kohm 1/16W	RD14S1J132JB

Ref. No.	Part No.	Part Name	Remarks
R418	9LA T012 57R	Carbon film 330ohm 1/4W (NB)	RDF25S331JT
R419,420	9LA T011 91R	Metal film 1ohm 1/4W(NB)	RNF2E010FT
R421~424	9LA T010 12R	Metal oxide 0.22ohm 1W	RER22J0001NT
R425		Carbon chip 20kohm 1/32W	RMC73M-1F203JR
R426		Carbon chip 100kohm 1/32W	RMC73M-1F104JR
R427		Carbon chip 270kohm 1/32W	RMC73M-1F274JR
R428	9LA T010 56R	Metal oxide 10ohm 1W	RE100J0001ST
R429	9LA T012 17R	Carbon film 10ohm 1/4W (NB)	RDF25S100JT
R430		Carbon chip 22kohm 1/32W	RMC73M-1F223JR
R431		Carbon chip 20kohm 1/32W	RMC73M-1F203JR
R433		Carbon chip 8.2kohm 1/32W	RMC73M-1F822JR
R434		Carbon chip 750ohm 1/32W	RMC73M-1F751JR
R435		Carbon chip 100kohm 1/32W	RMC73M-1F104JR
R436		Carbon film 1.8kohm 1/16W	RD14S1J182JB
R501,502		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R503,504		Carbon chip 27kohm 1/32W	RMC73M-1F273JR
R505		Carbon Chip 220ohm 1/32W	RMC73M-1F221JR
R506		Carbon Chip 220ohm 1/32W	RMC73M-1F221JR
R507,508		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R509,510		Carbon chip 470kohm 1/32W	RMC73M-1F474JR
R511,512		Carbon chip 33kohm 1/32W	RMC73M-1F333JR
⚠R513,514	9LA T037 01R	Fusible 1.5kohm 1/4W(FR)	RN45B2E152JB-FR
R515,516		Carbon Chip 330ohm 1/32W	RMC73M-1F331JR
R517,518		Carbon film 33kohm 1/16W	RD14S1J333JB
R519,520		Carbon chip 1.6kohm 1/32W	RMC73M-1F162JR
R521,522		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
⚠R523,524	9LA T037 02R	Fusible 47ohm 1/4W(FR)	RN45B2E470JB-FR
R525~528	9LA T011 29R	Metal oxide 5.6kohm 1W	RE562J0001ST
R529,530		Carbon film 30kohm 1/16W	RD14S1J303JB
R531,532		Carbon film 1.2kohm 1/16W	RD14S1J122JB
R533,534		Carbon film 1.3kohm 1/16W	RD14S1J132JB
R535	9LA T012 08R	Carbon film 4.7ohm 1/4W (NB)	RDF25S4R7JT
⚠R536	9LA T037 03R	Fusible 4.7ohm 1/4W(FR)	RN45B2E4R7JB-FR
R537,538	9LA T011 91R	Metal film 1ohm 1/4W(NB)	RNF2E010FT
R539,540	9LA T012 57R	Carbon film 330ohm 1/4W (NB)	RDF25S331JT
R541,542	9LA T011 91R	Metal film 1ohm 1/4W(NB)	RNF2E010FT
R543~550	9LA T010 12R	Metal oxide 0.22ohm 1W	RER22J0001NT
R551,552		Carbon chip 20kohm 1/32W	RMC73M-1F203JR
R553,554		Carbon chip 100kohm 1/32W	RMC73M-1F104JR
R555,556		Carbon chip 270kohm 1/32W	RMC73M-1F274JR
R557,558		Carbon chip 22kohm 1/32W	RMC73M-1F223JR
R559,560	9LA T012 17R	Carbon film 10ohm 1/4W (NB)	RDF25S100JT
R561,562	9LA T010 56R	Metal oxide 10ohm 1W	RE100J0001ST
R563,564		Carbon chip 20kohm 1/32W	RMC73M-1F203JR
R565,566		Carbon chip 8.2kohm 1/32W	RMC73M-1F822JR
R567,578		Carbon chip 750ohm 1/32W	RMC73M-1F751JR
R569,570		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R571,572	9LA T038 01R	Metal oxide 470ohm 2W	RE471J0002ST
R573		Carbon film 2.2kohm 1/16W	RD14S1J222JB
R575		Carbon chip 100kohm 1/32W	RMC73M-1F104JR
R576,577		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR

Ref. No.	Part No.	Part Name	Remarks
R578,579		Carbon chip 27kohm 1/32W	RMC73M-1F273JR
R580		Carbon chip 13kohm 1/32W	RMC73M-1F133JR
R581,582		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R583		Carbon film 10kohm 1/16W	RD14S1J103JB
R584,585		Carbon film 15kohm 1/16W	RD14S1J153JB
R586~590		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R591,592		Carbon film 1.8kohm 1/16W	RD14S1J182JB
R751~573		Carbon chip 75ohm 1/32W	RMC73M-1F750JR
R754		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R756		Carbon chip 8.2kohm 1/32W	RMC73M-1F822JR
R757		Carbon film 330ohm 1/16W	RD14S1J331JB
R758		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R761		Carbon chip 75ohm 1/32W	RMC73M-1F750JR
R764		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R765		Carbon chip 22kohm 1/32W	RMC73M-1F223JR
R766		Carbon chip 75ohm 1/32W	RMC73M-1F750JR
R767		Carbon chip 22kohm 1/32W	RMC73M-1F223JR
R803~806	9LA T010 12R	Metal oxide 0.22ohm 1W	RER22J0001NT
R807		Carbon film 1kohm 1/16W	RD14S1J102JB
⚠R808	9LA T011 74R	Fusible 68ohm 1/4W(FR)	RN14B2E680JB-FR
R809		Carbon film 3.9kohm 1/16W	RD14S1J392JB
R810		Carbon chip 560kohm 1/32W	RMC73M-1F564JR
R811		Carbon chip 22kohm 1/32W	RMC73M-1F223JR
R812		Carbon chip 560kohm 1/32W	RMC73M-1F564JR
R813		Carbon chip 3.6kohm 1/32W	RMC73M-1F362JR
R814		Carbon Chip 120ohm 1/32W	RMC73M-1F121JR
R815		Carbon chip 2.7kohm 1/32W	RMC73M-1F272JR
R816		Carbon chip 390kohm 1/32W	RMC73M-1F394JR
R817		Carbon Chip 47ohm 1/32W	RMC73M-1F470JR
R818		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R819		Carbon Chip 47ohm 1/32W	RMC73M-1F470JR
R820		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R821		Carbon Chip 4.7ohm 1/32W	RMC73M-1F4R7JR
R822		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R823		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
R824		Carbon chip 33kohm 1/32W	RMC73M-1F333JR
R825		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R826		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R827		Carbon chip 220kohm 1/32W	RMC73M-1F224JR
R828		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R829,830		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R831		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R832		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R833		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R834		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R835		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R836		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R837		Carbon chip 20kohm 1/32W	RMC73M-1F203JR
R840		Carbon chip 1.8kohm 1/32W	RMC73M-1F182JR
R841		Carbon chip 2.2kohm 1/32W	RMC73M-1F222JR

Ref. No.	Part No.	Part Name	Remarks
R842		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
R844		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R845		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R847		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R848		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R850		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R851,852		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R853		Carbon film 10kohm 1/16W	RD14S1J103JB Asia model only
R854		Carbon film 20kohm 1/16W	RD14S1J203JB Asia model only
R855,856		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R857,858		Carbon chip 2.2kohm 1/32W	RMC73M-1F222JR
R859~867		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R868		Carbon film 10kohm 1/16W	RD14S1J103JB U.S.A./Canada models only
R869		Carbon film 20kohm 1/16W	RD14S1J203JB Asia model only
R955,956		Carbon Chip 100ohm 1/32W	RMC73M-1F101JR
R957		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R958		Carbon chip 24kohm 1/32W	RMC73M-1F243JR
R959		Carbon Chip 100ohm 1/32W	RMC73M-1F101JR
R960,961		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R962,963		Carbon chip 24kohm 1/32W	RMC73M-1F243JR
R964,965		Carbon Chip 100ohm 1/32W	RMC73M-1F101JR
R968		Carbon Chip 100ohm 1/32W	RMC73M-1F101JR
CAPACITORS GROUP			
C129,130		Ceramic chip 56pF/50V	CK73MSL1H560JR Europe/U.K. models only
C134		Ceramic chip 0.01μF/50V	CK73MF1H103ZR Europe/U.K. models only
C201		Electrolytic 47μF/25V	CE04W1E470MB
C202		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
C204		Electrolytic 33μF/35V	CE04W1V330MB
C205		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C206		Electrolytic 10μF/50V	CE04W1H100MB
C207		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C208		Ceramic chip 22pF/50V	CK73MSL1H220JR
C209~211		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C401		Electrolytic 22μF/50V	CE04W1H220MB
C402		Electrolytic 10μF/50V	CE04W1H100MB
C403		Ceramic chip 100pF/50V	CK73MSL1H101JR
C404		Ceramic chip 33pF/50V	CK73MSL1H330JR
C405	9L0 2478 42R	Ceramic 30pF/500V	CC45SL2H330JB
C406		Electrolytic 47μF/50V	CE04W1H470MB
C407		Mylar film 1000pF/50V	CQ92M1H102KB
C408		Electrolytic 47μF/50V	CE04W1H470MB

Ref. No.	Part No.	Part Name	Remarks
C409	9L0 2478 54R	Ceramic 100pF/500V	CC45SL2H101JB
C410		Electrolytic 10μF/100V	CE04W2A100MB
C411	9L0 2478 54R	Ceramic 100pF/500V	CC45SL2H101JB
C414		Mylar film 0.01μF/50V	CQ92M1H103KB
C415		Mylar film 0.1μF/50V	CQ92M1H104KB
C416		Electrolytic 47μF/25V	CE04W1E470MB
C418		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C419		Electrolytic 47μF/25V	CE04W1E470MB
C501,502		Electrolytic 22μF/50V	CE04W1H220MB
C503		Electrolytic 10μF/50V	CE04W1H100MB
C504,505		Ceramic chip 33pF/50V	CK73MSL1H330JR
C506,507		Mylar film 1000pF/50V	CQ92M1H102KB
C508,509	9L0 2478 42R	Ceramic 30pF/500V	CC45SL2H330JB
C510~513		Electrolytic 47μF/50V	CE04W1H470MB
C514,515	9L0 2478 54R	Ceramic 100pF/500V	CC45SL2H101JB
C516,517		Electrolytic 10μF/100V	CE04W2A100MB
C518,519	9L0 2478 54R	Ceramic 100pF/500V	CC45SL2H101JB
C522,523		Mylar film 0.01μF/50V	CQ92M1H103KB
C524,525		Mylar film 0.1μF/50V	CQ92M1H104KB
C526,527		Electrolytic 47μF/25V	CE04W1E470MB
C528-532		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C533-535		Mylar film 0.033μF/50V	CQ92M1H333KB
C536		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C537,538		Mylar film 0.033μF/50V	CQ92M1H333KB
C539~541		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C542,543		Electrolytic 22μF/50V	CE04W1H220MB
C544		Electrolytic 10μF/50V	CE04W1H100MB
C545,546		Ceramic chip 100pF/50V	CK73MSL1H101JR
C547		Electrolytic 470μF/63V	CE04W1J471MF
C550		Electrolytic 1μF/50V(BP)	CE04W1H1R0MB(BP)
C552		Electrolytic 10μF/50V	CE04W1H100MB
C751~753		Electrolytic 100μF/10V	CE04W1A101MB
C754		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C755,756		Electrolytic 10μF/50V	CE04W1H100MB
C758		Electrolytic 22μF/50V	CE04W1H220MB
C759,760		Electrolytic 100μF/10V	CE04W1A101MB
C761		Electrolytic 22μF/50V	CE04W1H220MB
C762,763		Electrolytic 4.7μF/50V	CE04W1H4R7MB
C805,806	9LA L009 42Q	Electrolytic 8200μF/56V	CE04W1_822M
C807		Electrolytic 1μF/50V	CE04W1H010MB
C808		Electrolytic 10μF/50V	CE04W1H100MB
C809		Electrolytic 1μF/50V	CE04W1H010MB
C810~812		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
C813		Electrolytic 47μF/25V	CE04W1E470MB
C814		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
C815		Electrolytic 330μF/6.3V	CE04W0J331MB
C816		Electrolytic 47μF/25V	CE04W1E470MB
C817		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C818		Electrolytic 220μF/6.3V	CE04W0J221MB

Ref. No.	Part No.	Part Name	Remarks
C819		Mylar film 0.12μF/50V	CQ92M1H124KB
C820	9L0 8000 88Q	Electrolytic 3300μF/6.3V	CE04W0J332MF
C821		Electrolytic 4.7μF/50V	CE04W1H4R7MB
C822,823		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C824,825		Electrolytic 10μF/50V	CE04W1H100MB
C826,827		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C828		Mylar film 0.1μF/100V	CQ92M2A104KB
C829,830	9L0 2539 34Q	Electrolytic 2200μF/35V	CE04W1F222MF
C831	9LA N005 91R	Mylar film 0.1μF/100V	CQ92M2A104KB
C832		Electrolytic 10μF/50V	CE04W1H100MB
C833,834		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C835		Electrolytic 10μF/50V	CE04W1H100MB
C836		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C837		Electrolytic 100μF/10V(SRA)	CE04W1A101MB(SRA)
C839	9LA L004 79Q	Electrolytic 3300μF/16V	CE04W1C332MF
C840		Ceramic 0.01μF/50V	CK45F1H103ZB
C908		Mylar film 0.1μF/50V	CQ92M1H104KB
C951~956		Ceramic chip 330pF/50V	CK73MSL1H331JR
C957		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
C958		Electrolytic 4.7μF/50V(SRA)	CE04W1H4R7MB(SRA)
C960		Electrolytic 4.7μF/50V	CE04W1H4R7MB
C962,963		Ceramic chip 0.1μF/25V	CK73MF1E104ZR

OTHER PARTS GROUP				Q'ty
E007~010	9L2 7292 52R	Fuse holder		4
JK103	9LE R002 28	2P US pin jack		1
JK201	9LE R002 44	1P US pin jack(orange)		1
JK501	9L2 6950 13	Headphone jack		1
JK502	9LE R006 11	6P screw terminal		1
JK503	9LE U000 03	4P SP terminal		1
JK504	9LE R002 24	4P US pin jack		1
JK751	9LE R002 34	3P US pin jack(yellow)		1
JK752	9LE R002 27	2P US pin jack(yellow)		1
JK951	9LE R002 23	6P US pin jack		1
L201	9L2 1229 38R	Coil 4.7μH		1
L202	9L2 1229 34R	Coil 2.2μH		1
L401	9L2 2273 63	Audio trap coil		1
L501,502	9L2 2273 63	Audio trap coil		2
RY401	9L2 6413 21	Relay(OSA-SS-224DM3)		1
RY501	9L2 6413 21	Relay(OSA-SS-224DM3)		1
S501	9LF E001 81	Speaker switch		1
X801	399 9018 003	Ceramic resonator CST4.00MGW		1
CN2B	9LE D007 83	17P FFC connector		1
CN4A	9LE Y000 73	5P pin header		1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
CN5A	9LE Y000 79	11P pin header		1
CN6A	9LE Y000 85	16P pin header		1
CN7A	9LE Y000 71	3P pin header		1
CN8A	9LE Y000 89	20P pin header		1
CN9A	9LE Y000 84	15P pin header		1
CN10A	9LE Y000 75	7P pin header		1
CN11A	9LE Y000 77	9P pin header		1
CN11B	9LE Y000 97	9P socket		1
CN14	9LE F069 59	5P KR-DA connector cord		1
CN17	9LE F069 79	3P KR-DA connector cord	U.S.A./Canada models only	1
PG3	9L2 6752 82	3P PH pin post(L)		1
PG12	9L2 9590 53	4P PH pin post		1
PG13	9L2 9590 58	9P PH pin post		1
FB201	9LB Z014 21	Beads inductor		1
FB801	9LB Z014 23R	Beads inductor	Except Europe/ U.K. models	1
	9LJ T094 61	Main P.W.B. Ass'y	U.S.A./Canada models	
	9LJ T094 62	Main P.W.B. Ass'y	Europe model	
	9LJ T094 63	Main P.W.B. Ass'y	U.K. model	
	9LJ T094 64	Main P.W.B. Ass'y	Asia model	

TUNER P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC1	263 0891 001	IC LA1265S	
IC2	263 0439 007	IC LA3401	
IC3	9LC K098 31R	IC LC72131M	
IC91	9LC K044 51	IC SAA6579	Europe/U.K. models only
IC92	9LC K044 71R	IC LC7074M	Europe/U.K. models only
IC301~303	262 2214 007	IC LC7536	
IC304~309	263 0615 902	IC BA15218F	
TR1	9LC F011 21R	Transistor 2SK161(Y)	Europe/U.K. models only
TR2	9LC F023 21R	Transistor KTC3197	
TR3,4	269 0046 003	Transistor DTA114ES	
TR7,8	269 0072 909	Transistor DTC323TS	
TR9	269 0079 902	Transistor DTC144TS	
TR10	269 0080 904	Transistor DTA114TS	
TR601~604	271 0094 016	Transistor 2SA970(BL)	
TR605,606	273 0235 020	Transistor 2SC1841(E/F)	
TR607,608	273 0198 028	Transistor 2SC1815(GR)	
TR609,610	274 0060 007	Transistor 2SD667A(C)	
TR611,612	272 0053 005	Transistor 2SB647A(C)	
TR613,614	273 0430 003	Transistor 2SC4278(E)	
TR615,616	271 0276 009	Transistor 2SA1633(E)	
TR617,618	273 0235 020	Transistor 2SC1841(E/F)	
TR901	274 0163 904	Transistor 2SD601A	
D1~4	9L2 3989 21T	Diode 1SS133	
D5	9L2 3980 62T	Diode 1N4001	
D91	9L2 3989 21T	Diode 1SS133	Europe/U.K. models only
D601,602	9L2 3989 21T	Diode 1SS133	
D901~906	9L2 3980 62T	Diode 1N4001	
D907	9L2 3989 21T	Diode 1SS133	
ZD601	276 0463 914	Zener diode HZS6C-2	
TH601	9LC J001 51	Thermister	
RESISTORS GROUP			
R1		Carbon film 1kohm 1/16W	RD14S1J102JB
R2		Carbon film 5.6kohm 1/16W	RD14S1J562JB Europe/U.K. models only
R4		Carbon film 10kohm 1/16W	RD14S1J103JB Europe/U.K. models only
R5		Carbon film 390ohm 1/16W	RD14S1J391JB Europe/U.K. models only
R5		Carbon film 1kohm 1/16W	RD14S1J102JB Except Europe/U.K. models
R6		Carbon film 330ohm 1/16W	RD14S1J331JB Europe/U.K. models only
R7		Carbon film 4.7kohm 1/16W	RD14S1J472JB
R8		Carbon film 330ohm 1/16W	RD14S1J331JB
R9		Carbon film 220ohm 1/16W	RD14S1J221JB
R10		Carbon film 1.8kohm 1/16W	RD14S1J182JB
R11		Carbon film 330ohm 1/16W	RD14S1J331JB
R14	9LA T012 44R	Carbon film 100ohm 1/4W (NB)	RDF25S101JT
R15		Carbon film 5.6kohm 1/16W	RD14S1J562JB
R16		Carbon film 2.2kohm 1/16W	RD14S1J222JB
R17		Carbon film 1kohm 1/16W	RD14S1J102JB
R19	9LA T012 44R	Carbon film 100ohm 1/4W (NB)	RDF25S101JT
R20		Carbon film 15kohm 1/16W	RD14S1J153JB
R21		Carbon film 120ohm 1/16W	RD14S1J121JB
R22		Carbon film 18kohm 1/16W	RD14S1J183JB U.S.A./Canada models only
R22		Carbon film 39kohm 1/16W	RD14S1J393JB Except U.S.A./ Canada models
R23		Carbon film 1.2kohm 1/16W	RD14S1J122JB Europe/U.K. models only
R24		Carbon film 6.8kohm 1/16W	RD14S1J682JB
R25,26		Carbon film 10kohm 1/16W	RD14S1J103JB
R27		Carbon film 3.3kohm 1/16W	RD14S1J332JB
R28		Carbon film 11kohm 1/16W	RD14S1J113JB
R29		Carbon film 68kohm 1/16W	RD14S1J683JB
R30,31		Carbon film 62kohm 1/16W	RD14S1J623JB
R32		Carbon film 150kohm 1/16W	RD14S1J154JB Europe/U.K. models only
R32		Carbon film 100kohm 1/16W	RD14S1J104JB Except Europe/U.K. models
R33,34		Carbon film 180kohm 1/16W	RD14S1J184JB Europe/U.K. models only
R33,34		Carbon film 120kohm 1/16W	RD14S1J124JB Except Europe/U.K. models
R35		Carbon film 150kohm 1/16W	RD14S1J154JB Europe/U.K. models only
R35		Carbon film 100kohm 1/16W	RD14S1J104JB Except Europe/U.K. models
R36		Carbon film 3.3kohm 1/16W	RD14S1J332JB
R37		Carbon film 10kohm 1/16W	RD14S1J103JB
R38		Carbon film 100kohm 1/16W	RD14S1J104JB
R39,40		Carbon film 1.8kohm 1/16W	RD14S1J182JB
R41,42		Carbon film 4.7kohm 1/16W	RD14S1J472JB Europe/U.K. models only
R41,42		Carbon film 6.8kohm 1/16W	RD14S1J682JB Except Europe/U.K. models
R43		Carbon film 18kohm 1/16W	RD14S1J183JB
R45		Carbon film 10kohm 1/16W	RD14S1J103JB
R46		Carbon film 5.6kohm 1/16W	RD14S1J562JB

Ref. No.	Part No.	Part Name	Remarks
R50		Carbon film 100ohm 1/16W	RD14S1J101JB Except Europe/ U.K. models
R51		Carbon film 3.3kohm 1/16W	RD14S1J332JB
R52		Carbon film 100kohm 1/16W	RD14S1J104JB
R301		Carbon film 47kohm 1/16W	RD14S1J473JB
R302		Carbon film 220kohm 1/16W	RD14S1J224JB
R303		Carbon film 47kohm 1/16W	RD14S1J473JB
R304		Carbon film 100kohm 1/16W	RD14S1J104JB
R305		Carbon film 10kohm 1/16W	RD14S1J103JB
R306		Carbon film 750ohm 1/16W	RD14S1J751JB
R307		Carbon film 100kohm 1/16W	RD14S1J104JB
R308,309		Carbon film 47kohm 1/16W	RD14S1J473JB
R310		Carbon film 220kohm 1/16W	RD14S1J224JB
R311		Carbon film 100kohm 1/16W	RD14S1J104JB
R312		Carbon film 4.7kohm 1/16W	RD14S1J472JB
R313		Carbon film 430ohm 1/16W	RD14S1J431JB
R314		Carbon film 100ohm 1/16W	RD14S1J101JB
R315		Carbon film 47kohm 1/16W	RD14S1J473JB
R316		Carbon film 220kohm 1/16W	RD14S1J224JB
R317		Carbon film 47kohm 1/16W	RD14S1J473JB
R318		Carbon film 100kohm 1/16W	RD14S1J104JB
R319		Carbon film 4.7kohm 1/16W	RD14S1J472JB
R320		Carbon film 430ohm 1/16W	RD14S1J431JB
R321		Carbon film 100ohm 1/16W	RD14S1J101JB
R322		Carbon film 47kohm 1/16W	RD14S1J473JB
R323		Carbon film 47kohm 1/16W	RD14S1J473JB
R324		Carbon film 220kohm 1/16W	RD14S1J224JB
R325		Carbon film 4.7kohm 1/16W	RD14S1J472JB
R326		Carbon film 430ohm 1/16W	RD14S1J431JB
R327		Carbon film 100kohm 1/16W	RD14S1J104JB
R328		Carbon film 100ohm 1/16W	RD14S1J101JB
R329		Carbon film 47kohm 1/16W	RD14S1J473JB
R330		Carbon film 220kohm 1/16W	RD14S1J224JB
R331		Carbon film 47kohm 1/16W	RD14S1J473JB
R332		Carbon film 100kohm 1/16W	RD14S1J104JB
R333,334		Carbon film 1kohm 1/16W	RD14S1J102JB
R335		Carbon film 100ohm 1/16W	RD14S1J101JB
R336,337		Carbon film 47kohm 1/16W	RD14S1J473JB
R338		Carbon film 220kohm 1/16W	RD14S1J224JB
R339,340		Carbon film 1kohm 1/16W	RD14S1J102JB
R341		Carbon film 100kohm 1/16W	RD14S1J104JB
R342		Carbon film 100ohm 1/16W	RD14S1J101JB
R343		Carbon film 4.7kohm 1/16W	RD14S1J472JB
R344		Carbon film 3.3kohm 1/16W	RD14S1J332JB
R601,602		Carbon chip 220ohm 1/32W	RMC73M-1F221JR
R603,604		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R605,606		Carbon chip 33kohm 1/32W	RMC73M-1F333JR
⚠ R607,608	9LA T037 01R	Fusible 1.5kohm 1/4W(FR)	RN14B2E152JB-FR
R609,610		Carbon chip 330ohm 1/32W	RMC73M-1F331JR

Ref. No.	Part No.	Part Name	Remarks
R611,612		Carbon chip 470kohm 1/32W	RMC73M-1F474JR
R613,614		Carbon film 33kohm 1/16W	RD14S1J333JB
R615,616		Carbon chip 1.6kohm 1/32W	RMC73M-1F162JR
R617,618		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
⚠ R619,620	9LA T037 02R	Fusible 47ohm 1/4W(FR)	RN45B2E470JB-FR
R621,622		Carbon film 1.3kohm 1/16W	RD14S1J132JB
R623,624		Carbon film 1.2kohm 1/16W	RD14S1J122JB
R625,626		Carbon film 30kohm 1/16W	RD14S1J303JB
R627~630	9LA T011 29R	Metal oxide 5.6kohm 1W	RE562J0001ST
R631~634	9LA T011 91R	Metal film 1ohm 1/4W(NB)	RNF2E010FT
R635,636	9LA T012 57R	Carbon film 330ohm 1/4W (NB)	RDF25S331JT
R637~644	9LA T010 12R	Metal oxide 0.22ohm 1W	RER22J0001NT
R645,646		Carbon chip 20kohm 1/32W	RMC73M-1F203JR
R647,648		Carbon chip 100kohm 1/32W	RMC73M-1F104JR
R649,650		Carbon chip 270kohm 1/32W	RMC73M-1F274JR
R651,652		Carbon chip 22kohm 1/32W	RMC73M-1F223JR
R653,654	9LA T012 17R	Carbon film 10ohm 1/4W (NB)	RDF25S100JT
R655,656	9LA T010 56R	Metal oxide 10ohm 1W	RE100J0001ST
R657,658		Carbon chip 20kohm 1/32W	RMC73M-1F203JR
⚠ R659,660	9LA T037 03R	Fusible 4.7ohm 1/4W(FR)	RN45B2E4R7JB-FR
R661,662		Carbon film 1.8kohm 1/16W	RD14S1J182JB
R901		Carbon film 2.7Mohm 1/2W	2.7M(1/2W) U.S.A./Canada models only
R902		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R903		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
CAPACITORS GROUP			
C1		Ceramic 0.01µF/16V	CK45B1C103MB
C4		Ceramic 12pF/50V	CK45SL1H120JB
C6		Electrolytic 220µF/16V	CE04W1C221MB Europe/U.K. models only
C7		Ceramic 0.01µF/16V	CK45B1C103MB
C8		Ceramic 100pF/50V	CK45SL1H101JB
C11		Electrolytic 1µF/50V(BP)	CE04W1H010MB-BP
C12		Electrolytic 1µF/50V	CE04W1H010MB
C13		Electrolytic 47µF/25V	CE04W1E470MB
C15		Ceramic 0.01µF/16V	CK45B1C103MB
C16,17		Ceramic 100pF/50V	CK45SL1H101JB
C18		Ceramic 0.01µF/16V	CK45B1C103MB
C19		Electrolytic 0.47µF/50V	CE04W1HR47MB
C20		Electrolytic 1µF/50V	CE04W1H010MB
C21		Electrolytic 10µF/50V	CE04W1H100MB
C22		Ceramic 0.022µF/50V	CK45F1H223ZB
C23		Ceramic 100pF/50V	CK45SL1H101JB Except Europe/ U.K. models
C24		Mylar film 0.056µF/50V	CQ92M1H563KB
C25		Electrolytic 22µF/50V	CE04W1H220MB
C26		Electrolytic 22µF/50V	CE04W1H220MB Europe/U.K. models only

Ref. No.	Part No.	Part Name	Remarks
C27		Electrolytic 22µF/50V	CE04W1H220MB
C28		Electrolytic 220µF/6.3V	CE04W0J221MB
C29		Ceramic 0.01µF/16V	CK45B1C103MB
C30		Ceramic 560pF/50V	CK45B1H561KB Europe/U.K. models only
C31		Ceramic 0.01µF/16V	CK45B1C103MB
C33,34		Ceramic 15pF/50V	CK45CH1H150JB
C36,37		Ceramic 0.01µF/16V	CK45B1C103MB
C38		Mylar film 0.047µF/50V	CQ92M1H473KB
C39		Ceramic 0.01µF/16V	CK45B1C103MB
C40		Electrolytic 1µF/50V	CE04W1H010MB
C41		Electrolytic 47µF/25V	CE04W1E470MB
C42		Electrolytic 1µF/50V	CE04W1H010MB
C43		Electrolytic 0.22µF/50V(SRA)	CE04W1HR22MB-SRA
C44		Electrolytic 1µF/50V	CE04W1H010MB
C45		Ceramic 0.01µF/16V	CK45B1C103MB
C46,47		Electrolytic 2.2µF/50V	CE04W1H2R2MB
C48		Electrolytic 1µF/50V	CE04W1H010MB
C49		Ceramic 0.01µF/16V	CK45B1C103MB
C51		Electrolytic 2.2µF/50V	CE04W1H2R2MB
C52		Electrolytic 10µF/50V	CE04W1H100MB
C53,54		Ceramic 330pF/50V	CK45B1H331KB Europe/U.K. models only
C53,54		Ceramic 680pF/50V	CK45B1H681KB Except Europe/ U.K. models
C55		Ceramic 120pF/50V	CK45SL1H121JB Europe/U.K. models only
C56,57		Ceramic 0.01µF/16V	CK45B1C103MB
C59,60		Ceramic 0.01µF/16V	CK45B1C103MB
C61,62		Ceramic 4700pF/25V	CK45B1E472MB Europe/U.K. models only
C65		Ceramic 0.01µF/16V	CK45B1C103MB
C87		Electrolytic 10µF/50V	CE04W1H100MB
C91		Electrolytic 2.2µF/50V	CE04W1H2R2MB Europe/U.K. models only
C92		Ceramic 560pF/50V	CK45B1H561KB Europe/U.K. models only
C93		Ceramic 0.01µF/16V	CK45B1C103MB Europe/U.K. models only
C94		Electrolytic 10µF/50V	CE04W1H100MB Europe/U.K. models only
C95,96		Ceramic 27pF/50V	CK45CH1H270JB Europe/U.K. models only
C97		Electrolytic 10µF/50V	CE04W1H100MB Europe/U.K. models only
C301~319		Electrolytic 10µF/50V	CE04W1H100MB
C321		Electrolytic 4.7µF/50V	CE04W1H4R7MB
C323		Electrolytic 4.7µF/50V	CE04W1H4R7MB
C328~330		Electrolytic 22µF/50V	CE04W1H220MB

Ref. No.	Part No.	Part Name	Remarks
C601,602		Electrolytic 10µF/50V	CE04W1H100MB
C603,604		Ceramic chip 100pF/50V	CK73MSL1H101JR
C605,606		Ceramic chip 33pF/50V	CK73MSL1H330JR
C607,608		Mylar film 1000pF/50V	CQ92M1H102KB
C609,610	9L0 2478 42R	Ceramic 33pF/500V	CC45SL2H330JB
C611~614		Electrolytic 47µF/50V	CE04W1H470MB
C615,616	9L0 2478 54R	Ceramic 100pF/500V	CC45SL2H101JB
C617,618	9L0 8000 21R	Electrolytic 10µF/100V	CE04W2A100MB
C619,620	9L0 2478 54R	Ceramic 100pF/500V	CC45SL2H101JB
C625,626		Ceramic chip 0.01µF/50V	CK73MF1H103ZR
C627,628		Mylar film 0.1µF/50V	CQ92M1H104KB
C629		Electrolytic 470µF/63V	CE04W1J471MB
C630,631		Ceramic chip 0.01µF/50V	CK73MF1H103ZR
C632,633		Mylar film 0.033µF/50V	CQ92M1H333KB
C901	9LA N001 31S	Ceramic 0.01 µF/250V(AC)	0.01UF 250V PA103-C
C902		Ceramic chip 0.01µF/50V	CK73MF1H103ZR Except U.S.A./ Canada models
C903,904		Ceramic 0.01µF/50V	CK45F1H103ZB
C905	9LA L004 76Q	Electrolytic 2200µF/25V	CE04W1E222M
C906,907		Electrolytic 1µF/50V	CE04W1H010MB

OTHER PARTS GROUP				Q'ty
CN1B	9LE D007 72	7P FFC connector		1
CN4B	9LE Y000 93	5P socket		1
CN5B	9LE Y000 99	11P socket		1
CN6B	9LE Y001 05	16P socket		1
CN7B	9LE Y000 91	3P socket		1
CN12	9LE F069 19	4P KR-DA connector cord		1
CN13	9LE F069 39	9P KR-DA connector cord		1
CN15	9LE F06879	3P KR-DA connector cord	Except U.S.A./ Canada models	1
CF1	9L2 1349 92	Ceramic filter SFE10.7MA-8	Except Europe/ U.K. models	1
CF1,2	9LB N001 01	Ceramic filter SFT10.7MS2-A	Europe/U.K. models only	2
CF2	9LB N001 11	Ceramic filter SFT10.7MS2G-A	Except Europe/ U.K. models	1
CF3	9LB P005 01	Ceramic filter BFU450C4N		1
CF4	9LB P004 91	Ceramic filter CMU2-456A1		1
E001,002	9L2 7292 52R	Fuse holder	U.S.A./Canada models only	2
E003,004	9L2 7292 52R	Fuse holder		2
E005,006	9L2 7292 52R	Fuse holder	Asia model only	2
PG15	9L2 9590 52	3P PH pin post		1
PG16	9L2 6742 84	2P-4S VH pin post		1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
⚠PT902	9LB T005 31	Sub power trans E3	U.S.A./Canada models	1
⚠PT902	9LB T005 32	Sub power trans E2	Europe/ U.K. models	1
⚠PT902	9LB T005 33	Sub power trans E1	Asia model	1
JK1	9LE U000 11	Ant. terminal		1
JK601	9LE U000 86	4P SP terminal		1
⚠JK901	9LE Y004 91	AC outlet	U.S.A./Canada models only	1
L601,602	9L2 2273 63	Audio trap coil		1
LF1	9L2 1363 13	Low pass filter (FB-7SG)	Europe/U.K. models only	1
LF2,3	9L2 1363 14	Low pass filter (19kHz)	Europe/U.K. models only	2
RL601	9L2 6413 21	Relay (OSA-SS-224DM3)		1
RY901	9L2 6405 76	Relay (SDT-SS-112DM)		1
S1	9L2 6225 21	Slide switch	Asia model only	1
⚠S901	9LF E003 61	Power switch	Except U.S.A./ Canada models	1
⚠S902,903	9LF G000 11	Voltage selector	Asia model only	2
⚠S904	9LF E002 01	Power switch	U.S.A./Canada models only	1
BL1	9LB H005 31	AM RF block		1
T3	9LB J002 51	AM IFT		1
T4	9LB S000 71	FM DET trans.		1
TU1	9LH H000 31	Tuner pack	Except Europe/ U.K. models	1
TU1	9L2 4286 51	Tuner pack	Europe/U.K. models only	1
XT1	9L2 1701 32R	Crystal 7.2MHz		1
XT91	9L2 1701 33R	Crystal 4.332MHz	Europe/U.K. models only	1
XT92	9L2 7920 71R	Ceramic resonator CST4.0MGM	Europe/U.K. models only	1
#501	9LM F001 73	Insulatoin sheet		4
	9LJ T094 51	Tuner P.W.B. Ass'y	U.S.A./ Canada models	
	9LJ T094 52	Tuner P.W.B. Ass'y	Europe model	
	9LJ T094 53	Tuner P.W.B. Ass'y	U.K. model	
	9LJ T094 54	Tuner P.W.B. Ass'y	Asia model	

DSP P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC101	263 0672 903	IC BA4558F	
IC102	9LC K320 31	IC TC9273F-007	
IC151~154	9L2 3883 01R	IC BA4558F	
IC221	262 2663 001	IC ZR38601	
IC222	263 1048 002	IC BA033T	
IC223,224	262 1421 901	IC TC74HCT04AF	
IC240	9LC K320 41	IC AK4526	
IC241~243	9LC K150 81R	IC BA15218F	
IC244	9L2 3883 01R	IC BA4558F	
TR241~246	273 0253 015	Transistor 2SC2878(A/B)	
TR247	269 0132 904	Transistor UN2111	
TR248	269 0138 908	Transistor UN2213	
TR249	269 0134 902	Transistor UN2113	
TR250	269 0138 908	Transistor UN2213	
TR251	269 0134 902	Transistor UN2113	
TR252,253	269 0138 908	Transistor UN2213	
TR254,255	9L2 3240 85T	Transistor 2SK105(H)	
D151	276 0643 983	Zener diode MTZJ5.1B	
D221,222	9L2 3989 21T	Diode 1SS133	
D241~244	9L2 3989 21T	Diode 1SS133	
RESISTORS GROUP			
R101,102		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR Europe/U.K. models only
R103,104		Carbon chip 390ohm 1/32W	RMC73M-1F391JR
R105,106		Carbon chip 68kohm 1/32W	RMC73M-1F683JR
R107,108		Carbon chip 150kohm 1/32W	RMC73M-1F154JR
R109,110		Carbon chip 47ohm 1/32W	RMC73M-1F470JR
R111,112		Carbon chip 750ohm 1/32W	RMC73M-1F751JR
R113,114		Carbon chip 560kohm 1/32W	RMC73M-1F564JR
R115,116		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
R117,118		Carbon chip 22ohm 1/32W	RMC73M-1F220JR
R119,120		Carbon chip 470kohm 1/32W	RMC73M-1F474JR
R121~128		Carbon chip 1Mohm 1/32W	RMC73M-1F105JR
R131~138		Carbon chip 470ohm 1/32W	RMC73M-1F471JR
R141~144		Carbon chip 470ohm 1/32W	RMC73M-1F471JR
R151,152		Carbon chip 100ohm 1/32W	RMC73M-1F101JR
R153,154		Carbon chip 100kohm 1/32W	RMC73M-1F104JR
R155,156		Carbon chip 100kohm 1/32W	RMC73M-1F104JR
R157,158		Carbon chip 100ohm 1/32W	RMC73M-1F101JR
R159,160		Carbon chip 100kohm 1/32W	RMC73M-1F104JR
R161~166		Carbon chip 13kohm 1/32W	RMC73M-1F133JR
R167		Carbon chip 820ohm 1/32W	RMC73M-1F821JR
R171,172		Carbon chip 100ohm 1/32W	RMC73M-1F101JR
R173,174		Carbon chip 100kohm 1/32W	RMC73M-1F104JR
R175,176		Carbon chip 100ohm 1/32W	RMC73M-1F101JR
R177,178		Carbon chip 10kohm 1/32W	RMC73M-1F103JR

Ref. No.	Part No.	Part Name	Remarks
R179,180		Carbon chip 2.4kohm 1/32W	RMC73M-1F242JR
R181~184		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R185~188		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R189~192		Carbon chip 300ohm 1/32W	RMC73M-1F301JR
R221~224		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R229	9LA T012 28T	Metal film 27ohm 1/4W(NB)	RN14S2E270JR(NB)
R230,231		Carbon chip 1.5kohm 1/32W	RMC73M-1F152JR
R232		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R233,234		Carbon chip 1.5kohm 1/32W	RMC73M-1F152JR
R237		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R238		Carbon chip 1.5kohm 1/32W	RMC73M-1F152JR
R240~245		Carbon chip 27kohm 1/32W	RMC73M-1F273JR
R246~249		Carbon chip 220ohm 1/32W	RMC73M-1F221JR
R250,251		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R252~257		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R258		Carbon chip 1.5kohm 1/32W	RMC73M-1F152JR
R260,261		Carbon chip 9.1kohm 1/32W	RMC73M-1F912JR
R263		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R265		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
R266~268		Carbon chip 100kohm 1/32W	RMC73M-1F104JR
R269,270		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
R271		Carbon chip 27kohm 1/32W	RMC73M-1F273JR
R272,273		Carbon chip 24kohm 1/32W	RMC73M-1F243JR
R274		Carbon chip 100ohm 1/32W	RMC73M-1F101JR
R275		Carbon chip 100kohm 1/32W	RMC73M-1F104JR
R277		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
R278		Carbon chip 3.6kohm 1/32W	RMC73M-1F362JR
R279		Carbon chip 13kohm 1/32W	RMC73M-1F133JR
R280		Carbon chip 18kohm 1/32W	RMC73M-1F183JR
R282		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R283		Carbon chip 6.8kohm 1/32W	RMC73M-1F682JR
R284		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
R285,286		Carbon chip 3.6kohm 1/32W	RMC73M-1F362JR
R287~290		Carbon chip 4.7kohm 1/32W	RMC73M-1F472JR
R291		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
⚠R292	9LA T037 03T	Fuse resistor 4.7ohm 1/4W	RN45B2E4R7JB-FR
R293~297		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R298,299		Carbon chip 220ohm 1/32W	RMC73M-1F221JR
CAPACITORS GROUP			
C101,102		Ceramic chip 220pF/50V	CK73MSL1H221JR
C103,104		Electrolytic 10μF/50V	CE04W1H100MB(SSL)
C105,106		Ceramic chip 100pF/50V	CK73MSL1H101JR
C107,108		Electrolytic 33μF/35V	CE04W1V330MB(SSL)
C109,110		Mylar film 5600pF/50V	CQ92M1H562KB
C111,112		Mylar film 1500pF/50V	CQ92M1H152KB
C113,114		Electrolytic 2.2μF/50V	CE04W1H2R2MB(SSL)
C115,116		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C117		Electrolytic 1μF/50V	CE04W1H010MB(SSL)
C121~128		Ceramic chip 56pF/50V	CK73MSL1H560JR
			Europe/U.K. models only
C131~133		Ceramic chip 0.1μF/25V	CK73MF1E104ZR

Ref. No.	Part No.	Part Name	Remarks
C135,136		Ceramic chip 0.022μF/50V	CK73MF1H223ZR
C137		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
			Except Europe/U.K. models
C151,152		Electrolytic 10μF/50V	CE04W1H100MB(SSL)
C157,158		Electrolytic 10μF/50V	CE04W1H100MB(SSL)
C159~162		Mylar film 0.22μF/50V	CQ92M1H224KB
C163,164		Electrolytic 10μF/50V	CE04W1H100MB(SSL)
C165,166		Electrolytic 22μF/50V	CE04W1H220MB(SSL)
C167,168		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
C169,170		Electrolytic 47μF/25V	CE04W1E470MB(SSL)
C171,172		Mylar film 1500pF/50V	CQ92M1H152KB
C173		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
C174		Electrolytic 47μF/25V	CE04W1E470MB(SSL)
C221~226		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
C227		Electrolytic 47μF/25V	CE04W1E470MB(SSL)
C228		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
C229		Mylar film 0.047μF/50V	CQ92M1H473KB
C230,231		Ceramic chip 18pF/50V	CK73MCH1H180JR
C232,233		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
C234,235		Ceramic chip 0.01μF/50V	CK73MF1H103ZR
C236		Electrolytic 10μF/50V	CE04W1H100MB(SSL)
C237		Electrolytic 1μF/50V	CE04W1H010MB(SSL)
C238		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
			Except Europe/U.K. models
C240~245		Electrolytic 10μF/50V	CE04W1H100MB(SSL)
C246		Electrolytic 47μF/25V	CE04W1E470MB(SSL)
C247,248		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
C249		Electrolytic 10μF/50V	CE04W1H100MB(SSL)
C250		Electrolytic 47μF/25V	CE04W1E470MB(SSL)
C251,252		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
C253		Electrolytic 47μF/25V	CE04W1E470MB(SSL)
C254~259		Ceramic chip 0.027μF/25V	CK73MB1E273KR
C260~265		Electrolytic 10μF/50V	CE04W1H100MB(SSL)
C267		Mylar film 0.12μF/50V	CQ92M1H124KB
C268		Ceramic chip 0.056μF/16V	CK73MB1C563KR
C269		Electrolytic 10μF/50V	CE04W1H100MB(SSL)
C270,271		Electrolytic 1μF/50V	CE04W1H010MB(SSL)
C274~277		Ceramic chip 100pF/50V	CK73MSL1H101JR
C278		Ceramic chip 0.1μF/25V	CK73MF1E104ZR
C279,280		Electrolytic 10μF/50V	CE04W1H100MB(SSL)

Ref. No.	Part No.	Part Name	Remarks	Q'ty
OTHER PARTS GROUP				
FB221	9LB ZO14 21	Beads inductor	BL02RN1-R62	1
FB222~229	9LB MO02 88R	Beads inductor	BLM11B471SBPT	8
FB230~232	9LB ZO14 21	Beads inductor	BL02RN1-R62	3
FB233	9LB ZO14 23R	Beads inductor	Except Europe/U.K. models	1
JK101	9LE R002 23	6P US pin jack		1
JK102	9LE R002 22	8P US pin jack		1
L101	9L2 1229 52R	Coil LAL 470K		1
L240	9L2 1222 48M	Coil LA 470K		1
LF101,102	9LB J002 11	Low pass filter	Europe/U.K. models only	2
XT201	9LB P010 71	Crystal 12.288MHz		1
CN8B	9LE Y001 09	20P socket		1
CN9B	9LE Y001 04	15P socket		1
CN10B	9LE Y000 95	7P socket		1
PG14	9L2 9590 54	5P PH pin post		1
	9LJ T094 31	DSP P.W.B. Ass'y	U.S.A./Canada models	
	9LJ T094 32	DSP P.W.B. Ass'y	Europe model	
	9LJ T094 33	DSP P.W.B. Ass'y	U.K. model	
	9LJ T094 34	DSP P.W.B. Ass'y	Asia model	

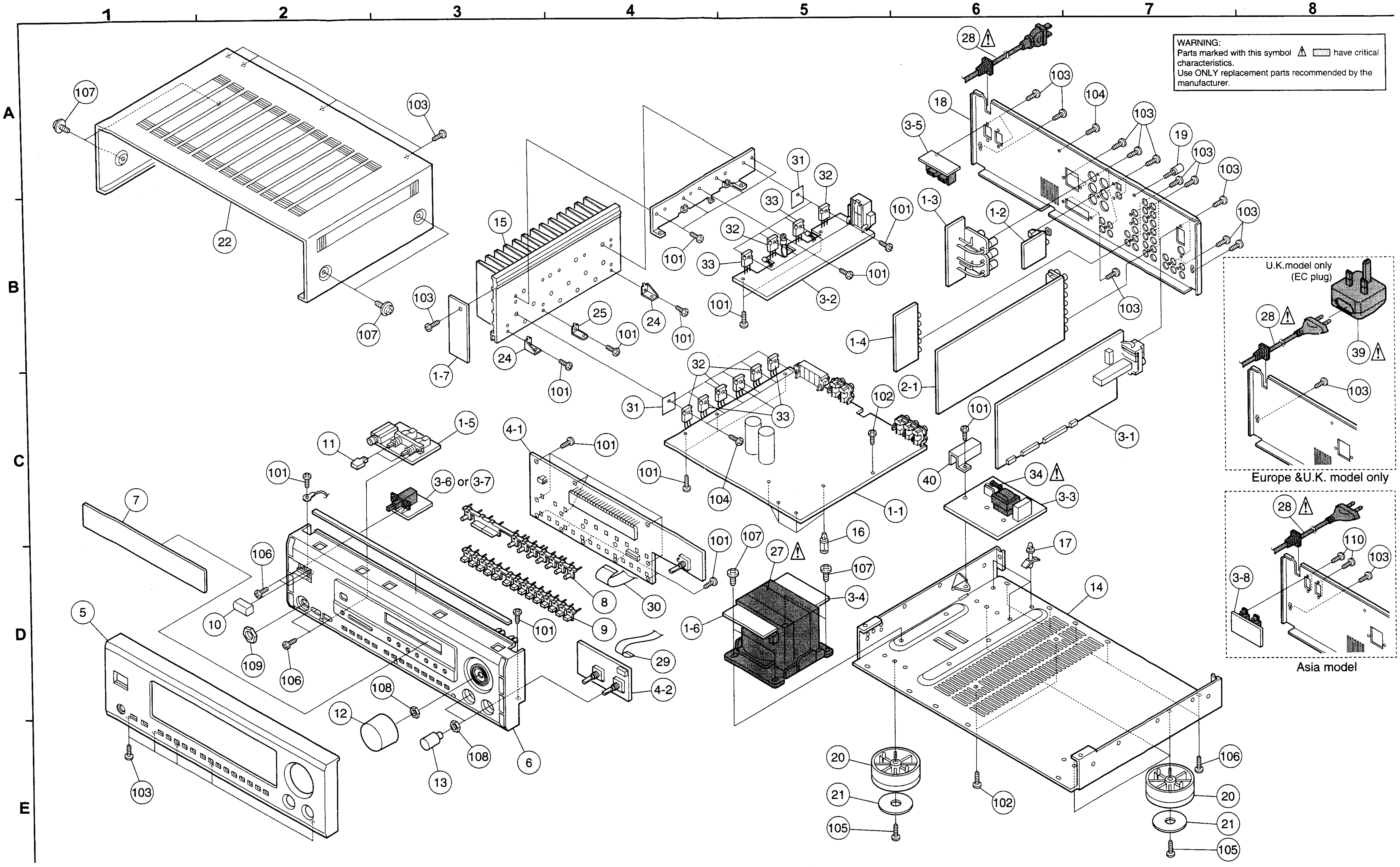
FL P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC451	9LC K014 51R	IC BA15218F	
IC701	9LC K320 51	IC LC75721E	
IC702	9LC W002 02	IC PIC28043	
TR701~703	269 0136 900	Transistor UN2211	
TR704	269 0134 902	Transistor UN2113	
TR705	269 0138 908	Transistor UN2213	
TR706	269 0134 902	Transistor UN2113	
TR707	269 0138 908	Transistor UN2213	
TR708	269 0134 902	Transistor UN2113	
TR709	269 0138 908	Transistor UN2213	
D701~703	9L2 3989 21T	Diode 1SS133	
ZD703	9L2 3481 61M	Zener diode MTZJ9.1A	
LED701~703	9LC H015 01	LED SLR56VC3F	
FL701	9LD D003 01	FL tube	
RESISTORS GROUP			
R451,452		Carbon chip 8.2kohm 1/32W	RMC73M-1F822JR
R453,454		Carbon chip 62kohm 1/32W	RMC73M-1F623JR
R455,456		Carbon chip 15kohm 1/32W	RMC73M-1F153JR
R457,458		Carbon chip 62kohm 1/32W	RMC73M-1F623JR
R463,464		Carbon chip 1.2kohm 1/32W	RMC73M-1F122JR
R465,465		Carbon chip 220ohm 1/32W	RMC73M-1F221JR
R467,468		Carbon chip 11kohm 1/32W	RMC73M-1F113JR
R469,470		Carbon chip 1.8kohm 1/32W	RMC73M-1F182JR
R471,472		Carbon Chip 6.8ohm 1/32W	RMC73M-1F6R8JR
R473,474		Carbon Chip 200ohm 1/32W	RMC73M-1F201JR
R475,476		Carbon chip 39ohm 1/32W	RMC73M-1F390JR
R477,478		Carbon chip 100ohm 1/32W	RMC73M-1F101JR
R701		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R702		Carbon Chip 200ohm 1/32W	RMC73M-1F201JR
R703		Carbon Chip 300ohm 1/32W	RMC73M-1F301JR
R704		Carbon Chip 510ohm 1/32W	RMC73M-1F511JR
R705		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R706		Carbon chip 3kohm 1/32W	RMC73M-1F302JR
R707		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R708		Carbon Chip 200ohm 1/32W	RMC73M-1F201JR
R709		Carbon Chip 300ohm 1/32W	RMC73M-1F301JR
R710		Carbon Chip 510ohm 1/32W	RMC73M-1F511JR
R711		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R712		Carbon chip 3kohm 1/32W	RMC73M-1F302JR
R713		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R714		Carbon Chip 200ohm 1/32W	RMC73M-1F201JR
R715		Carbon Chip 300ohm 1/32W	RMC73M-1F301JR

Ref. No.	Part No.	Part Name	Remarks
R716		Carbon Chip 510ohm 1/32W	RMC73M-1F511JR
R717		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R718		Carbon chip 3kohm 1/32W	RMC73M-1F302JR
R719		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R720		Carbon Chip 200ohm 1/32W	RMC73M-1F201JR
R721		Carbon Chip 300ohm 1/32W	RMC73M-1F301JR
R722		Carbon Chip 510ohm 1/32W	RMC73M-1F511JR
R723		Carbon chip 1kohm 1/32W	RMC73M-1F102JR
R724		Carbon film 33ohm 1/16W	RD14S1J330JR
R725		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R726,727		Carbon chip 680ohm 1/32W	RMC73M-1F681JR
R728,729		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
R730		Carbon chip 390ohm 1/32W	RMC73M-1F391JR
R731,732		Carbon chip 100ohm 1/32W	RMC73M-1F101JR
R733		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R734~736		Carbon chip 47kohm 1/32W	RMC73M-1F473JR
R737		Carbon chip 10kohm 1/32W	RMC73M-1F103JR
R738		Carbon chip 3kohm 1/32W	RMC73M-1F302JR
VR452	9LA Y006 82	Variable resistor 30kohm	
VR453	9LA Y006 81	Variable resistor 10kohm	
CAPACITORS GROUP			
C451,452		Electrolytic 10µF/50V	CE04W1H100MB(SSL)
C453~456		Ceramic chip 100pF/50V	CK73MSL1H101JR
C457,458		Electrolytic 47µF/25V	CE04W1E470MB(SSL)
C459,460		Mylar film 2200pF/50V	CQ92M1H222KB
C461,462		Mylar film 0.18µF/50V	CQ92M1H184KB
C463,464		Electrolytic 1µF/50V	CE04W1H010MB(SSL)
C467,468		Mylar film 0.012µF/50V	CQ92M1H123KB
C469,470		Mylar film 0.056µF/50V	CQ92M1H563KB
C471,472		Electrolytic 0.33µF/50V	CE04W1HR33MB(SRA)
C473,474		Ceramic chip 0.022µF/50V	CK73MF1H223ZR
C701~703		Ceramic chip 0.01µF/50V	CK73MF1H103ZR
C704		Electrolytic 100µF/10V	CE04W1A101MB(SSL)
C705		Ceramic chip 0.1µF/25V	CK73MF1E104ZR
C706		Electrolytic 100µF/50V	CE04W1H101MB(SSL)
C707		Ceramic chip 0.01µF/50V	CK73MF1H103ZR
C708	9L0 8000 64R	Electrolytic 330µF/6.3V	CE04W0J331MB(SSL)
C709		Ceramic chip 30pF/50V	CK73MSL1H300JR
C710		Ceramic chip 1000pF/50V	CK73MB1H102KR

Ref. No.	Part No.	Part Name	Remarks	Q'ty
OTHER PARTS GROUP				
FB701	9LB Z014 21	Beads inductor	BL02RN1-R62	1
S702~723	9LF E002 21R	Tact switch		22
S725,726	9LF E002 21R	Tact switch		2
RE724	9LF H001 51	Encoder		1
CN1A	9LE D008 02	7P FFC connector (L)		1
CN2A	9LE D003 22	17P FFC connector		1
CN3	9LE F068 99	2(3)P KR-DA connector cord		1
	9LJ T094 41	FL P.W.B. Ass'y	U.S.A./Canada models	
	9LJ T094 42	FL P.W.B. Ass'y	Europe model	
	9LJ T094 43	FL P.W.B. Ass'y	U.K. model	
	9LJ T094 44	FL P.W.B. Ass'y	Asia model	

EXPLODED VIEW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WARNING:
Parts marked with this symbol ⚠ ▭ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

PARTS LIST OF EXPLODED VIEW

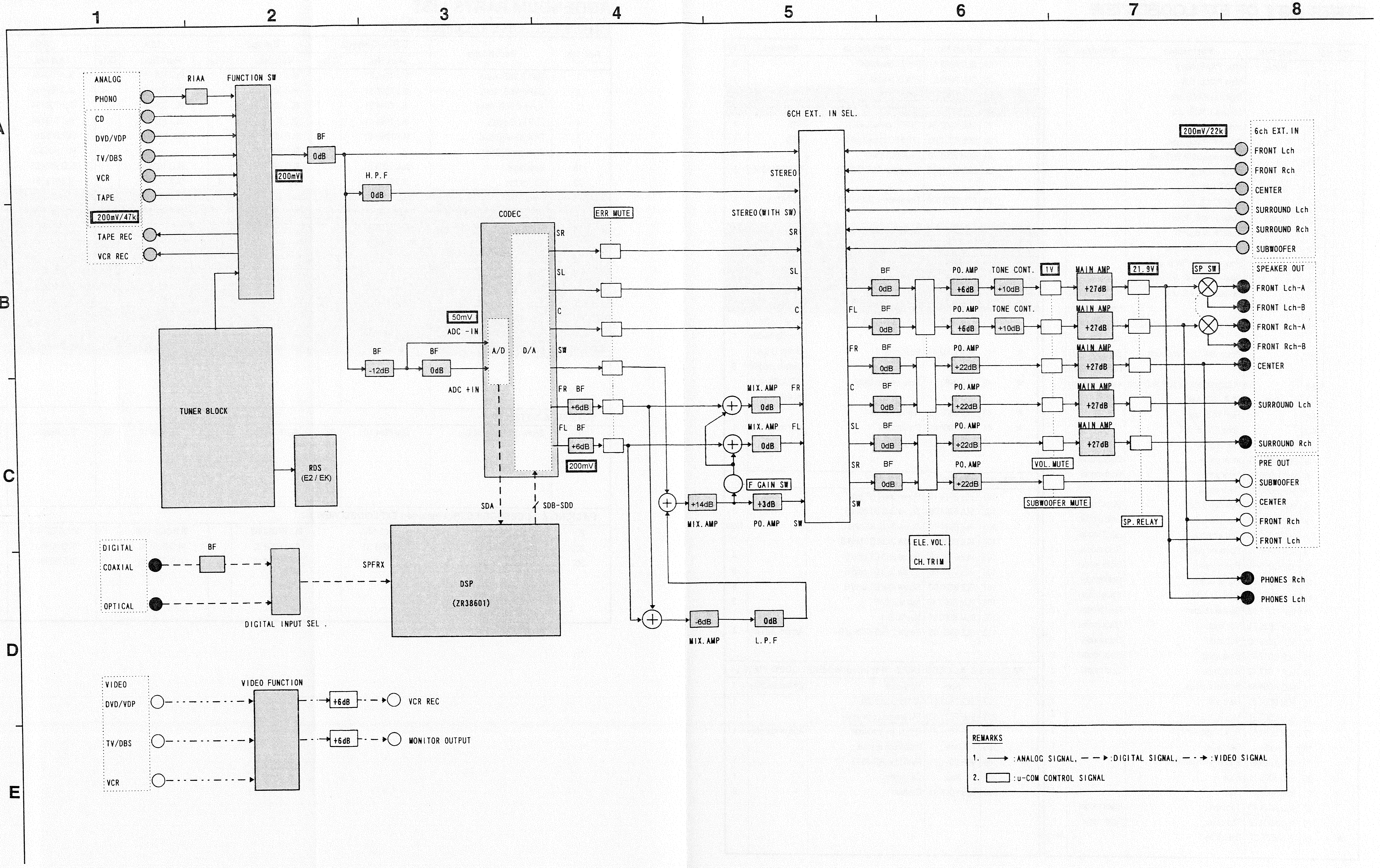
Ref. No.	Part No.	Part Name	Remarks	Q'ty
1	Note	Main P.W.B. Ass'y		1
1-1		Main P.W.B. unit		
1-2		Digital in P.W.B. unit		
1-3		SP jack P.W.B. unit		
1-4		Video P.W.B. unit		
1-5		SW. H/P P.W.B. unit		
1-6		Power trans(2)P.W.B. unit		
1-7		Protect P.W.B. unit		
2	Note	DSP P.W.B. Ass'y		1
2-1		DSP P.W.B. unit		
3	Note	Tuner P.W.B. Ass'y		1
3-1		Tuner P.W.B. unit		
3-2		Surround P.W.B. unit		
3-3		Power supply P.W.B. unit		
3-4		Power trans(1)P.W.B. unit		
3-5		AC outlet P.W.B. unit	U.S.A./Canada models only	
3-6		Power SW.(2) P.W.B. unit	U.S.A./Canada models only	
3-7		Power SW.(1) P.W.B. unit	Except U.S.A./ Canada models	
3-8		Voltage selector SW. P.W.B. unit	Asia model only	
4	Note	FL P.W.B. Ass'y		1
4-1		FL P.W.B. unit		
4-2		Tone P.W.B. unit		
5	Note	Front panel		1
6	9LP H066 71	Inner panel	Black model	1
6	9LP H066 72	Inner panel	Gold model	1
7	9LP H066 81	Clear panel		1
8	9LP C036 31	Function button	Black model	1
8	9LP C036 32	Function button	Gold model	1
9	9LP C036 41	Surround button	Black model	1
9	9LP C036 42	Surround button	Gold model	1
10	9LP C017 81	Power button	Black model	1
10	9LP C017 82	Power button	Gold model	1
11	9LP C017 91	Speaker button	Black model	2
11	9LP C017 92	Speaker button	Gold model	2
12	9LP C036 51	Vol. knob	Black model	1
12	9LP C036 52	Vol. knob	Gold model	1
13	9LP C017 41	Bass knob	Black model	2
13	9LP C017 42	Bass knob	Gold model	2
14	9LQ A004 82	Bottom chassis		1
15	9LM B004 01	Heat sink		1
16	9LM L002 51	Mini P.W.B. post		4
17	9LM L004 31	P.W.B. support(L)		3
18	Note	Rear plate		1
19	9LN X039 61	Phono earth terminal		1
20	9LQ J002 11	Foot		4
21	9LM S002 11	Felt		4
22	9LQ A014 41	Top cover	Black model	1
22	9LQ A004 99	Top cover	Gold model	1
★ 23	9L3 9737 31	Bar lok tie		Note
24	9LN A083 11	P.W.B. bracket(A)		2
25	9LN A083 21	P.W.B. bracket(B)		1
⚠ 27	Note	Power trans		1
⚠ 28	Note	AC cord		1
29	9LE K002 34	7P FFC cable(L=90)	W25	1
30	9LE K001 03	17P FFC cable(L=60)	W26	1
31	9LM F001 73	Insulation sheet		10
32	273 0430 003	Transistor 2SC4278(E)	TR407,513,514, 613,614	5
33	271 0276 009	Transistor 2SA1633(E)	TR408,515,516, 615,616	5
⚠ 34	Note	Fuse	F901	1
⚠★ 35	Note	Fuse	F902	1
⚠★ 36	Note	Fuse	F903	1
⚠★ 37	Note	Fuse	F904	1
⚠★ 38	Note	Fuse	F905	1
⚠ 39	9LE P000 62	EC plug	U.K. model only	1
40	9LN A206 22	P.W.B. protector	Except U.S.A./ Canada models	1
★ 41	9LM L003 41	Push rivet	Except U.S.A./ Canada models	6
★ 42	9L4 9485 11	Fuse caution label	U.S.A./Canada models only	1
★ 43	9L4 9303 12	Number sheet		1
★ 44	9LQ T008 82	Preset label	Asia model only	1
★ 45	9L4 9313 07	Origin label		1
SCREWS & NUTS				
101	9L8 6914 10	Screw 3×10 BT bind		33
102	9L8 6994 08	Screw 3×8 BT bind B		3
103	9L8 6994 10	Screw 3×10 BT bind B		Note
104	9L8 6994 14	Screw 3×14 BT bind B		7
105	9L8 6794 08	Screw 3×8 DT bind B		4
106	9L8 6794 06	Screw 3×6 DT bind B		9
107	9L8 6796 06	Screw 4×6 DT bind B		8
108	9LM K002 46	Nut M9×0.75		3
109	9LM K003 21	Nut M12×1		1
110	9L8 6993 08	Screw 2.6×8 BT bind B	Asia model only	4
PACKING & ACCESSORIES (Not included EXPLODED VIEW.)				
201	Note	Pory sack	for accessories	1
202	9L2 7593 41	AM loop antenna		1
203	9LE F021 33	FM antenna connector		1
204	9LE Y002 81	Edison plug adapter	Asia model only	1
205	Note	Instruction manual		1
206	9LH L011 61	Remocon(RC-859)		1
207	Note	Carton box		1
208	9LS P056 31	Cushion		2

ADDENDUM PARTS LIST

PARTS LIST OF EXPLODED VIEW

Ref. No.	Part Name	U.S.A./Canada		Europe		U.K.		Asia	
		Part No.	Q'ty	Part No.	Q'ty	Part No.	Q'ty	Part No.	Q'ty
1	Main P.W.B. Ass'y	9LJ T094 61		9LJ T094 62		9LJ T094 63		9LJ T094 64	
2	DSP P.W.B. Ass'y	9LJ T094 31		9LJ T094 32		9LJ T094 33		9LJ T094 34	
3	Tuner P.W.B. Ass'y	9LJ T094 51		9LJ T094 52		9LJ T094 53		9LJ T094 54	
4	FL P.W.B. Ass'y	9LJ T094 41		9LJ T094 42		9LJ T094 43		9LJ T094 44	
5	Front panel(Black)	9LP H066 61		9LP H066 62		9LP H066 62		9LP H066 67	
5	Front panel(Gold)	—		9LP H066 64		—		9LP H066 66	
18	Rear plate	9LQ A014 51		9LQ A014 52		9LQ A014 52		9LQ A014 53	
23	Bar lok tie	9L3 9737 31	8	9L3 9737 31	8	9L3 9737 31	8	9L3 9737 31	9
⚠ 27	Power trans	9LB T013 51		9LB T013 52		9LB T013 52		9LB T013 53	
⚠ 28	AC cord	9LE V007 01		9LE V005 86		9LE V005 86		9LE V005 86	
⚠ 34	Fuse 5A 125V (F901)	9LF N002 33		—		—		—	
⚠ 35	Fuse 5A 125V (F902)	9LF N002 33		—		—		—	
⚠ 35	Fuse T1.6A (F902)	—		9LF N002 28		9LF N002 28		—	
⚠ 35	Fuse T5A (F902)	—		—		—		9LF N002 23	
⚠ 36	Fuse T2.5A (F903)	—		—		—		9LF N002 22	
⚠ 37	Fuse 1.6A 250V (F904)	9LF N002 34		—		—		—	
⚠ 37	Fuse T1A (F904)	—		9LF N002 24		9LF N002 24		9LF N002 24	
⚠ 38	Fuse 1.6A 250V (F905)	9LF N002 34		—		—		—	
⚠ 38	Fuse T1A (F905)	—		9LF N002 24		9LF N002 24		9LF N002 24	
SCREWS & NUTS									
103	Screw 3x10 BT bind B	9L8 6994 10	33	9L8 6994 10	31	9L8 6994 10	31	9L8 6994 10	31
PACKING & ACCESSORIES (Not included EXPLODED VIEW.)									
201	Pory sack	9L3 6402 14W		9L3 6402 14W		9L3 6402 13W		9L3 6402 14W	
202	Instruction manual	9LQ R291 31		9LQ R291 32		9LQ R291 32		9LQ R291 33	
207	Carton box	9LS G090 41		9LS G090 42		9LS G090 42		9LS G090 43	

BLOCK / LEVEL DIAGRAM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MIX.AMP
+3dB
PO.AMP
-6dB
MIX.AMP
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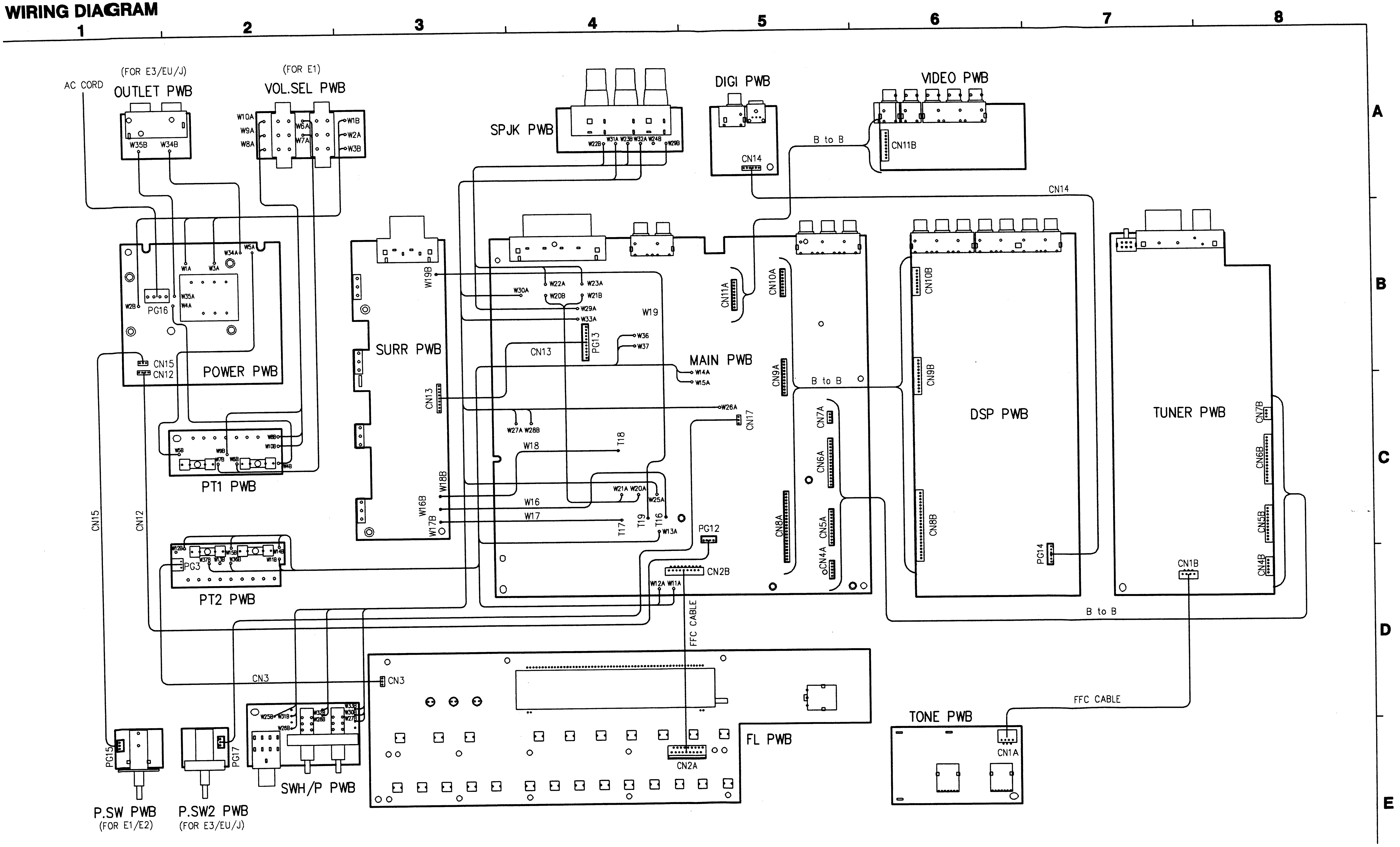
6CH EXT. IN SEL.
STEREO
STEREO(WITH SW)
SR
SL
C
FR
FL
SW
200mV/22k
6ch EXT. IN
FRONT Lch
FRONT Rch
CENTER
SURROUND Lch
SURROUND Rch
SUBWOOFER
FL
FR
C
SL
SR
SW
BF
0dB
PO.AMP
+6dB
TONE CONT.
+10dB
1V
MAIN AMP
+27dB
21.9V
SP SW
PO.AMP
+22dB
ELE.VOL.
CH.TRIM
VOL.MUTE
SUBWOOFER MUTE
SP.RELAY
SPEAKER OUT
FRONT Lch-A
FRONT Lch-B
FRONT Rch-A
FRONT Rch-B
CENTER
SURROUND Lch
SURROUND Rch
PRE OUT
SUBWOOFER
CENTER
FRONT Rch
FRONT Lch
PHONES Rch
PHONES Lch
VIDEO
DVD/VDP
TV/DBS
VCR
VIDEO FUNCTION
+6dB
VCR REC
+6dB
MONITOR OUTPUT

REMARKS

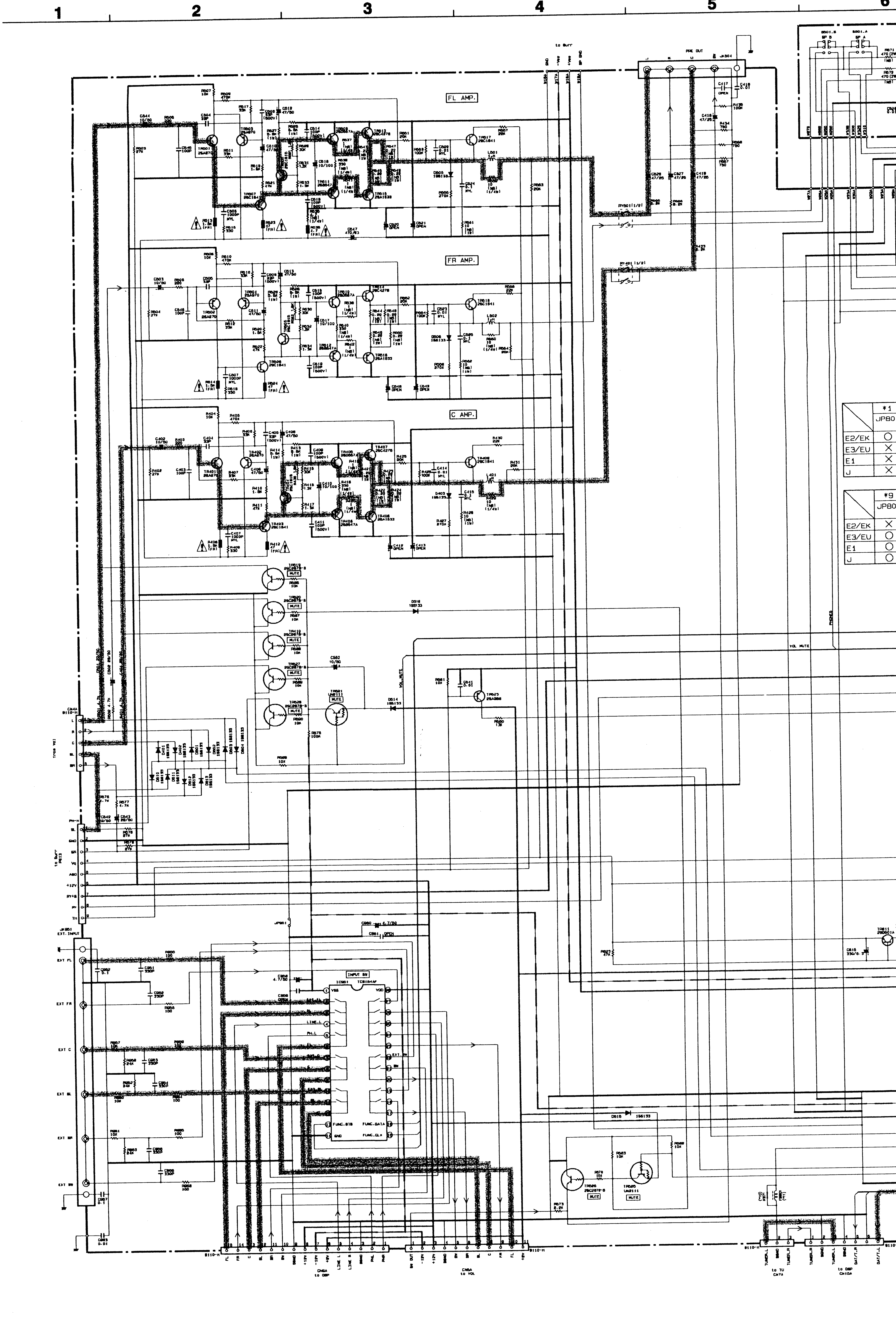
1. ──▸ :ANALOG SIGNAL, ─ ─▸:DIGITAL SIGNAL, ─·─▸:VIDEO SIGNAL
2. ▭ :u-COM CONTROL SIGNAL

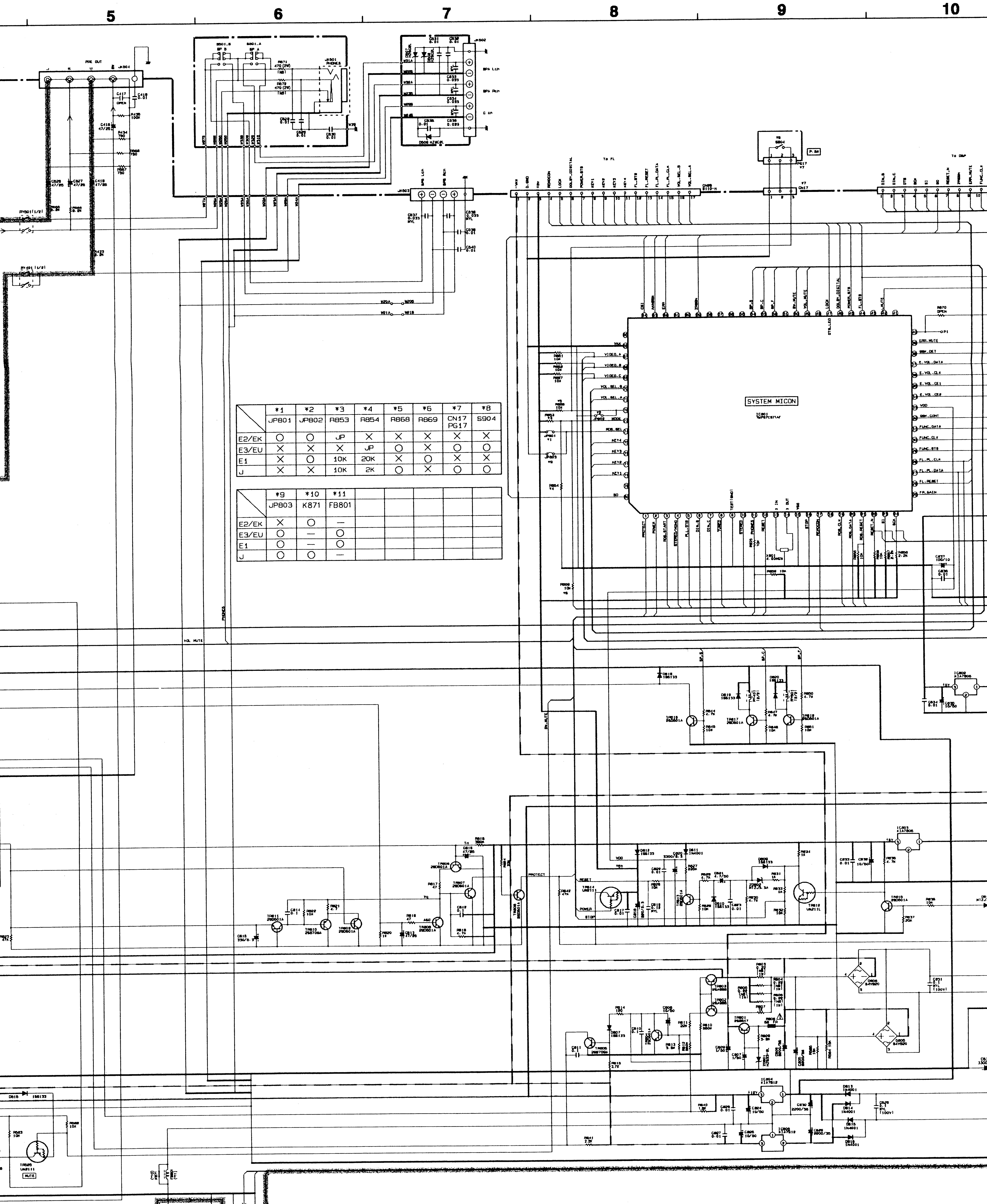
WIRING DIAGRAM


1
2
3
4
5
6
7
8
A
B
C
D
E
AC CORD
(FOR E3/EU/J)
OUTLET PWB
W35B
W34B
(FOR E1)
VOL.SEL PWB
W10A
W9A
W8A
W6A
W7A
W1B
W2A
W3B
SPJK PWB
W22B
W31A
W23B
W32A
W24B
W29B
DIGI PWB
CN14
VIDEO PWB
B to B
CN11B
CN14
W1A
W3A
W34A
W5A
W2B
PG16
W35A
W4A
CN15
CN12
POWER PWB
W5B
W9B
W7B
W8B
W8B
W10B
W4B
PT1 PWB
CN15
CN12
W12B
W15B
W14B
W37B
W13B
W36B
W11B
PG3
PT2 PWB
SURR PWB
W19B
CN13
W18B
W16B
W17B
W30A
W22A
W23A
W20B
W21B
W29A
W33A
W19
PG13
CN13
W36
W37
MAIN PWB
W14A
W15A
W26A
CN17
W27A
W28B
W18
T18
W21A
W20A
W25A
W16
W17
T17
T19
T16
W13A
PG12
CN2B
W12A
W11A
CN11A
CN10A
CN9A
B to B
CN7A
CN6A
CN8A
CN5A
CN4A
CN10B
CN9B
DSP PWB
CN8B
PG14
TUNER PWB
CN7B
CN6B
CN5B
CN4B
CN1B
B to B
FFC CABLE
CN3
CN3
FL PWB
CN2A
W25B
W31B
W26B
W32B
W28B
W33B
W30B
W27B
SWH/P PWB
PG15
PG17
P.SW PWB
(FOR E1/E2)
P.SW2 PWB
(FOR E3/EU/J)
FFC CABLE
TONE PWB
CN1A

NOTE:

SCHEMATIC DIAGRAMS (1/6)


1
2
3
4
5
6
FL AMP.
FR AMP.
C AMP.
PRE OUT
MUTE
INPUT SW
VOL MUTE
EXT. INPUT
EXT FL
EXT FR
EXT C
EXT SL
EXT SR
EXT SW
*1
JP80
E2/EK ○
E3/EU ×
E1 ×
J ×
*9
JP80
E2/EK ×
E3/EU ○
E1 ○
J ○
to DSP
to VOL
to TU


5
6
7
8
9
10
PRE OUT
JK804
JK801 PHONES
SP B
SP A
JK802
SPA Lch
SPA Rch
C ch
JK803
SPB Lch
SPB Rch
To FL
To DSP
P.SW
SYSTEM MICON
IC801
VOL MUTE
PHONES
PROTECT
VDD
RESET
POWER
STOP
MUTE
to TU CN7A
to DSP CN10A

	*1	*2	*3	*4	*5	*6	*7	*8
	JP801	JP802	R853	R854	R868	R869	CN17 PG17	S904
E2/EK	○	○	JP	×	×	×	×	×
E3/EU	×	×	×	JP	○	×	○	○
E1	×	○	10K	20K	×	○	×	×
J	×	×	10K	2K	○	×	○	○

	*9	*10	*11					
	JP803	K871	FB801					
E2/EK	×	○	—					
E3/EU	○	—	○					
E1	○	—	○					
J	○	○	—					

NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM

ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD

EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:

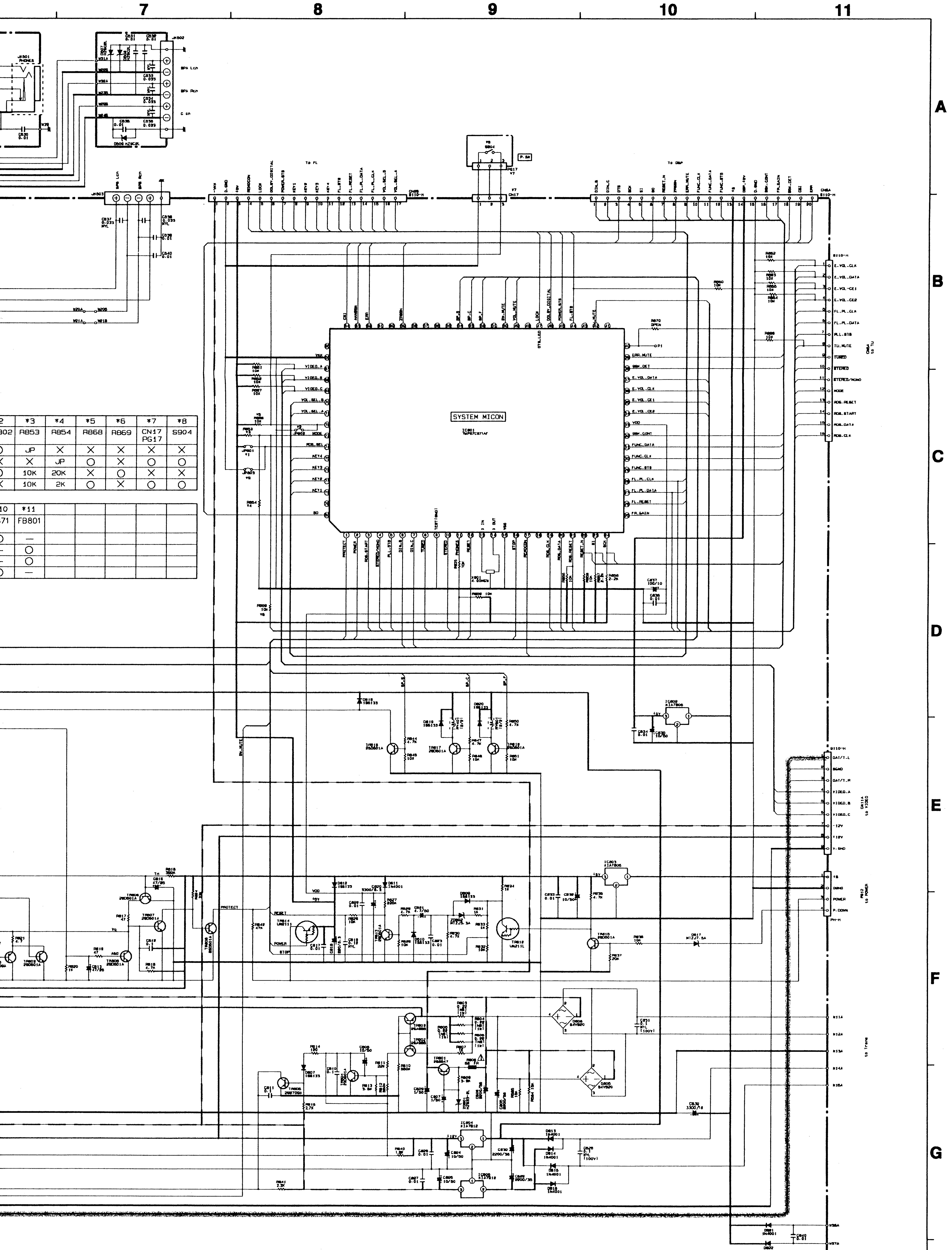
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

WARNING:

DO NOT return the unit to the customer until the problem is located and corrected.


7
8
9
10
11
A
B
C
D
E
F
G
SYSTEM MICON
IC801
JK802
SPA Lch
SPA Rch
C ch
JK801 PHONES
JK803
SPB Lch
SPB Rch
To FL
CN05 B11D-H
To DSP
CN6A B11D-H
S904
PG17
CN17
IC809
IC803
IC804
IC805
to Tu
to VIDEO
to POWER
to Trans

2	*3	*4	*5	*6	*7	*8
302	R853	R854	R868	R869	CN17 PG17	S904
○	JP	×	×	×	×	×
×	×	JP	○	×	○	○
○	10K	20K	×	○	×	×
×	10K	2K	○	×	○	○

10	*11					
71	FB801					
○	—					
—	○					
—	○					
○	—					

NOTICE
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

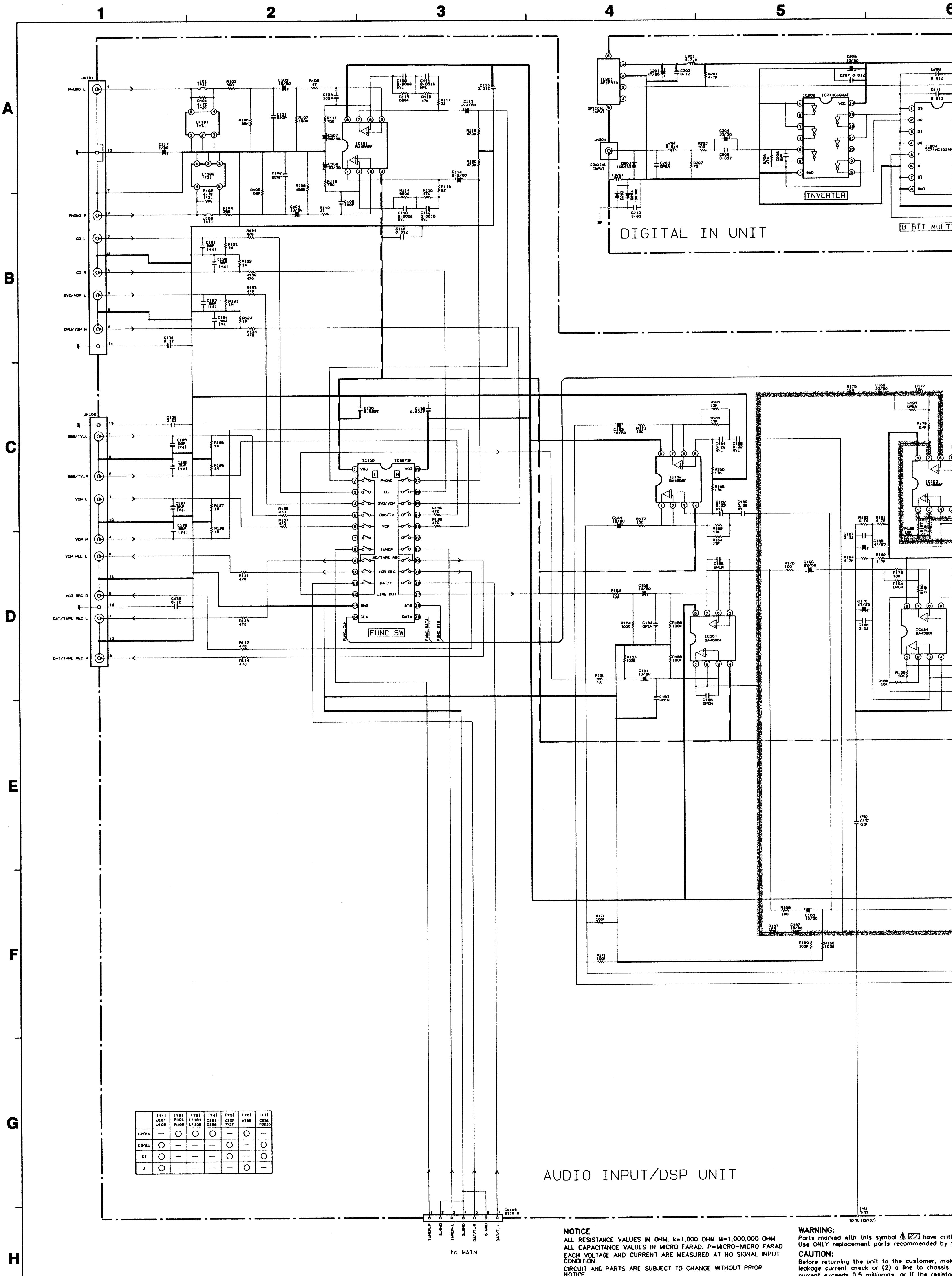
——— +B LINE
— — — −B LINE
▨ SIGNAL LINE

H

SCHEMATIC DIAGRAMS (1/6)

MAIN UNIT

SCHEMATIC DIAGRAMS (2/6)


1
2
3
4
5
6
A
B
C
D
E
F
G
H
DIGITAL IN UNIT
INVERTER
8 BIT MULTI
FUNC SW
AUDIO INPUT/DSP UNIT
JK101
JK102
JK201
PHONO L
PHONO R
CD L
CD R
DVD/VDP L
DVD/VDP R
DBS/TV-L
DBS/TV-R
VCR L
VCR R
VCR REC L
VCR REC R
DAT/TAPE REC L
DAT/TAPE REC R
OPTICAL INPUT
COAXIAL INPUT
IC101 BA4560F
IC100 TC9273F
IC102 BA4560F
IC103 BA4560F
IC104 BA4560F
IC151 BA4560F
IC201
IC202 TC74HCU04AF
IC204 TC74HC151AF
PHONO
CD
DVD/VDP
DBS/TV
VCR
TUNER
MD/TAPE REC
VCR REC
DAT/T
LINE OUT
VSS
VDD
GND
CLK
DATA
STB
CN108
TUNER-R
TUNER-L
DAT/T-R
DAT/T-L
to MAIN
TO TU (CN137)

	(*1) J101 J102	(*2) R101 R102	(*3) LF101 LF102	(*4) C121~ C128	(*5) C137 T137	(*6) X100	(*7) C238 FB233
E2/EK	—	○	○	○	—	○	—
E3/EU	○	—	—	—	○	—	○
E1	○	—	—	—	○	—	○
J	○	—	—	—	—	○	—

NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM

ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD

EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:

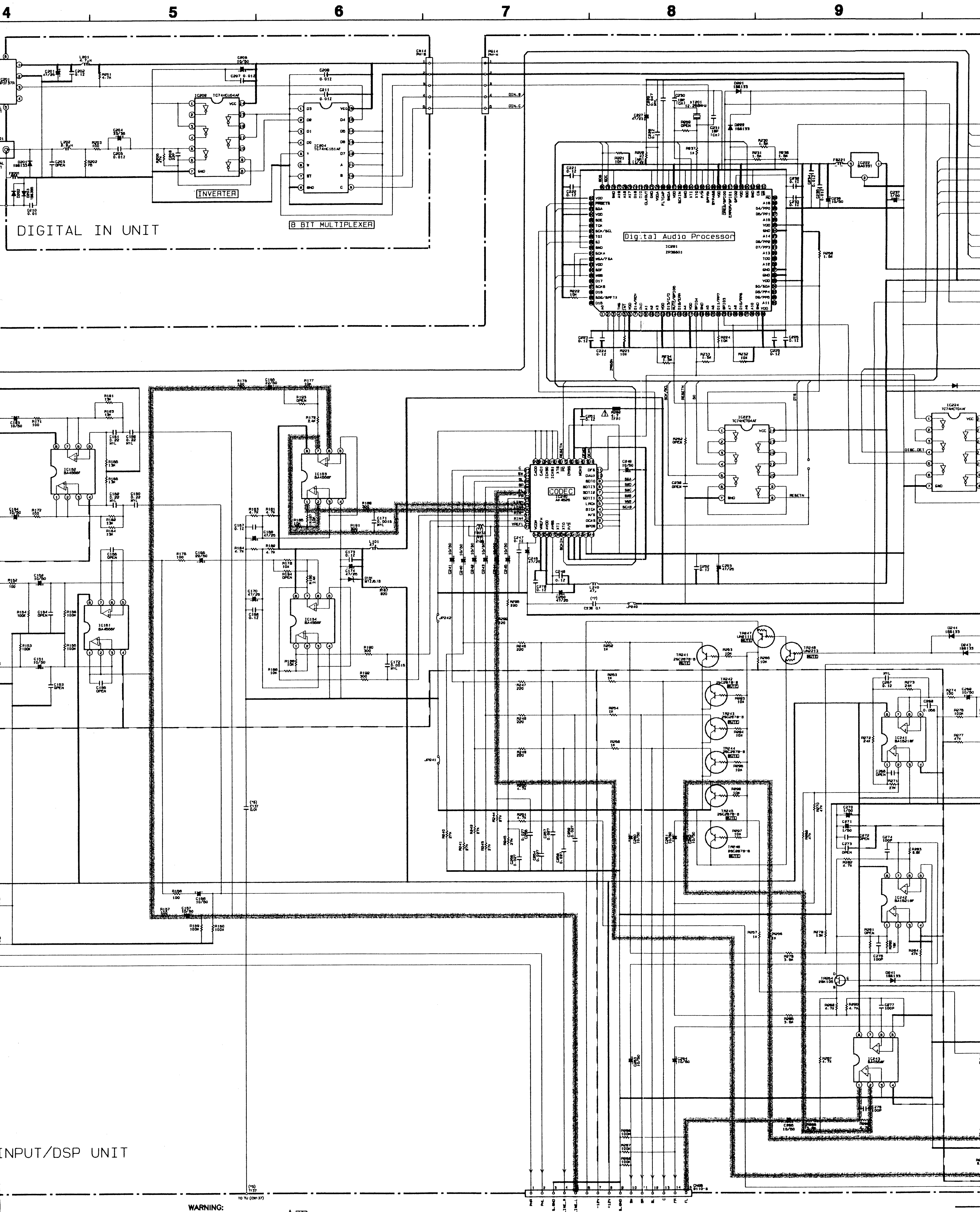
Parts marked with this symbol ⚠ ▨ have criti
Use ONLY replacement parts recommended by

CAUTION:

Before returning the unit to the customer, mak
leakage current check or (2) a line to chassis
current exceeds 0.5 milliamps, or if the resista
of the power cord is less than 460 kohms, the

WARNING:

DO NOT return the unit to the customer until
corrected.


4
5
6
7
8
9
DIGITAL IN UNIT
INVERTER
IC202 TC74HCU04AF
IC204 TC74HC151AF
8 BIT MULTIPLEXER
Digital Audio Processor
IC201 IR3R601
CODEC
IC240 AK4526
IC223 TC74HCT04AF
IC224 TC74HCT04AF
IC152 BA4560F
IC153 BA4560F
IC154 BA4560F
IC161 BA4560F
IC241 BA15218F
IC242 BA15218F
IC243 BA4560F
IC222 BA0331
DISC.DET
INPUT/DSP UNIT
TO TU (CN137)
to MAIN

CE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
NCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
E AND CURRENT ARE MEASURED AT NO SIGNAL INPUT

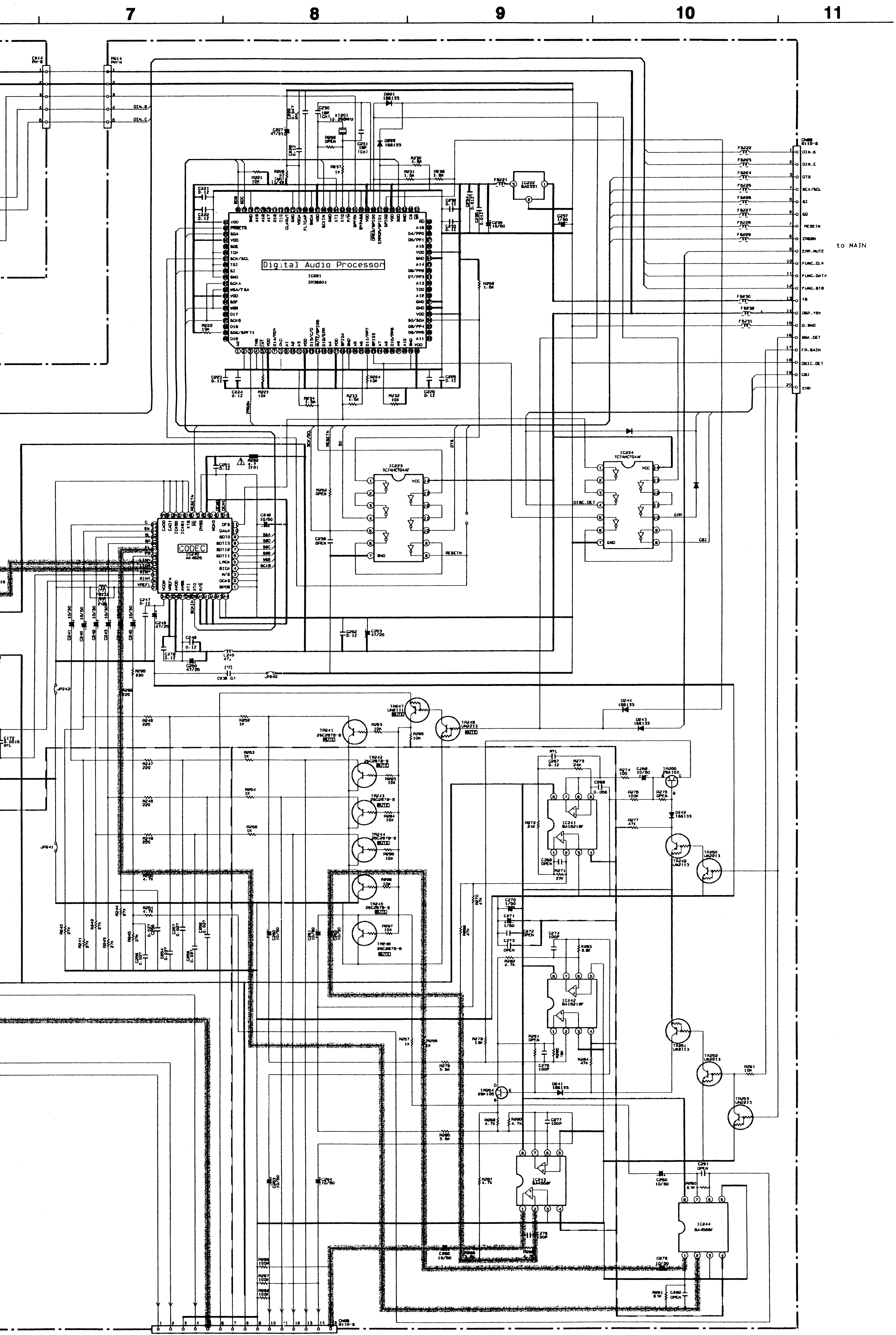
PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is detective.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

SCHEMATIC DIAGRAM
DSP UNIT


7
8
9
10
11
Digital Audio Processor
IC201
ZR38601
CODEC
IC240
AK4520
IC222
BA033T
IC223
TC74HCT04AF
IC224
TC74HCT04AF
IC241
BA15218F
IC242
BA15218F
IC243
BA4558F
IC244
BA4558F
X201
12.288MHz
to MAIN
DIN.B
DIN.C
DTS
SCK/SCL
SI
SD
RESETN
ZPBSN
EAR.MUTE
FUNC.CLK
FUNC.DATA
FUNC.STB
+B
DSP.+5V
D.GND
DBK.DET
FR.GAIN
DISC.DET
CBI
EAR
to MAIN

ics.
r.

e either (1) a
k. If the leakage
is to either side
ve.

ocated and

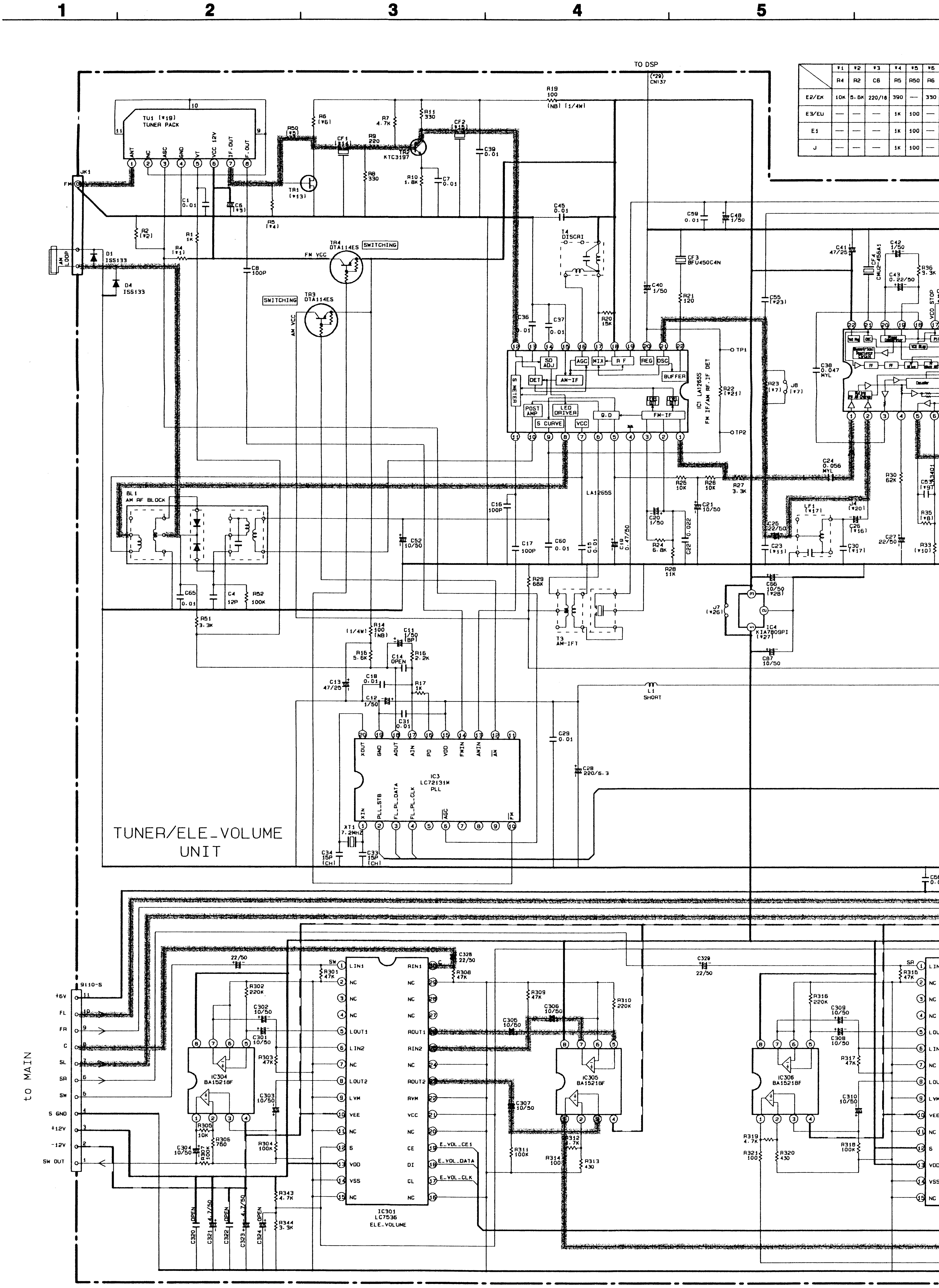
+B LINE

−B LINE

SIGNAL LINE

SCHEMATIC DIAGRAMS (2/6)
DSP UNIT

SCHEMATIC DIAGRAMS (3/6)



1
2
3
4
5
TO DSP
(*29)
CN137
TU1 (*19)
TUNER PACK
ANT
NC
AGC
GND
VT
VCC 12V
IF. OUT
F. OUT
JK1
FM
AM LOOP
D1 1SS133
D4 1SS133
R50 (*5)
R6 (*6)
R7 4.7K
R11 330
CF1
CF2 (*15)
R9 220
TR2 KTC3197
R8 330
R10 1.8K
C7 0.01
C39 0.01
R19 100 (NB) (1/4W)
TR1 (*13)
C1 0.01
C6 (*3)
R5 (*4)
R2 (*2)
R1 1K
R4 (*1)
TR4 DTA114ES
SWITCHING
FM VCC
C8 100P
TR3 DTA114ES
SWITCHING
AM VCC
C45 0.01
T4 DISCRI
C59 0.01
C48 1/50
CF3 BFU450C4N
C40 1/50
R21 120
C36 0.01
C37 0.01
R20 15K
C55 (*23)
SD ADJ
AGC
MIX
R F
REG
OSC
S METER
DET
AM-IF
BUFFER
POST AMP
LED DRIVER
Q.D
FM-IF
S CURVE
VCC
IC1 LA1265S
FM IF/AM RF.IF DET
TP1
TP2
R22 (*21)
R23 (*7)
J8 (*7)
LA1265S
R25 10K
R26 10K
R27 3.3K
C20 1/50
C21 10/50
R24 6.8K
C22 0.022
C18 0.47/50
C15 0.01
C16 100P
C17 100P
C60 0.01
R28 11K
R29 68K
T3 AM-IFT
C41 47/25
CF4 CMU2-456A1
C42 1/50
C43 0.22/50
R36 3.3K
VCO STOP
C38 0.047 MYL
C24 0.056 MYL
R30 62K
LF1 (*17)
(*20)
C26 (*16)
C25 22/50
C23 (*11)
C30 (*17)
C27 22/50
R33 (*10)
R35 (*8)
C53 (*9)
J7 (*26)
C66 10/50 (*28)
IC4 KIA7809PI (*27)
C67 10/50
BL1 AM RF BLOCK
C52 10/50
C65 0.01
C4 12P
R52 100K
R51 3.3K
R14 100 (1/4W) (NB)
C11 1/50 (BP)
R15 5.6K
C14 OPEN
R16 2.2K
C19 0.01
R17 1K
C13 47/25
C12 1/50
C31 0.01
L1 SHORT
C29 0.01
C28 220/6.3
XOUT
GND
AOUT
AIN
PD
VDD
FMIN
AMIN
AM
IC3 LC72131M PLL
XIN
PLL_STB
FL_PL_DATA
FL_PL_CLK
AGC
FM
XT1 7.2MHZ
C34 15P (CH)
C33 15P (CH)
TUNER/ELE_VOLUME UNIT
9110-S
+6V
FL
FR
C
SL
SR
SW
S GND
+12V
-12V
SW OUT
to MAIN
22/50
R302 220K
C302 10/50
C301 10/50
R303 47K
IC304 BA15218F
C303 10/50
R305 10K
R306 750
C304 10/50
R307 100K
R304 100K
R343 4.7K
R344 3.3K
C320 OPEN
C321 4.7/50
C322 OPEN
C323 4.7/50
C324 OPEN
SW
R301 47K
LIN1
NC
LOUT1
LIN2
LOUT2
LVM
VEE
S
VDD
VSS
RIN1
ROUT1
RIN2
ROUT2
RVM
VCC
CE
DI
CL
E_VOL_CE1
E_VOL_DATA
E_VOL_CLK
IC301 LC7536 ELE-VOLUME
C328 22/50
R308 47K
R309 47K
C306 10/50
C305 10/50
R310 220K
IC305 BA15218F
C307 10/50
R311 100K
R312 4.7K
R313 430
R314 100
C329 22/50
R316 220K
C309 10/50
C308 10/50
R317 47K
IC306 BA15218F
C310 10/50
R319 4.7K
R321 100
R320 430
R318 100K
SR
R315 47K

	*1	*2	*3	*4	*5	*6
	R4	R2	C6	R5	R50	R6
E2/EK	10K	5.6K	220/16	390	—	390
E3/EU	—	—	—	1K	100	—
E1	—	—	—	1K	100	—
J	—	—	—	1K	100	—

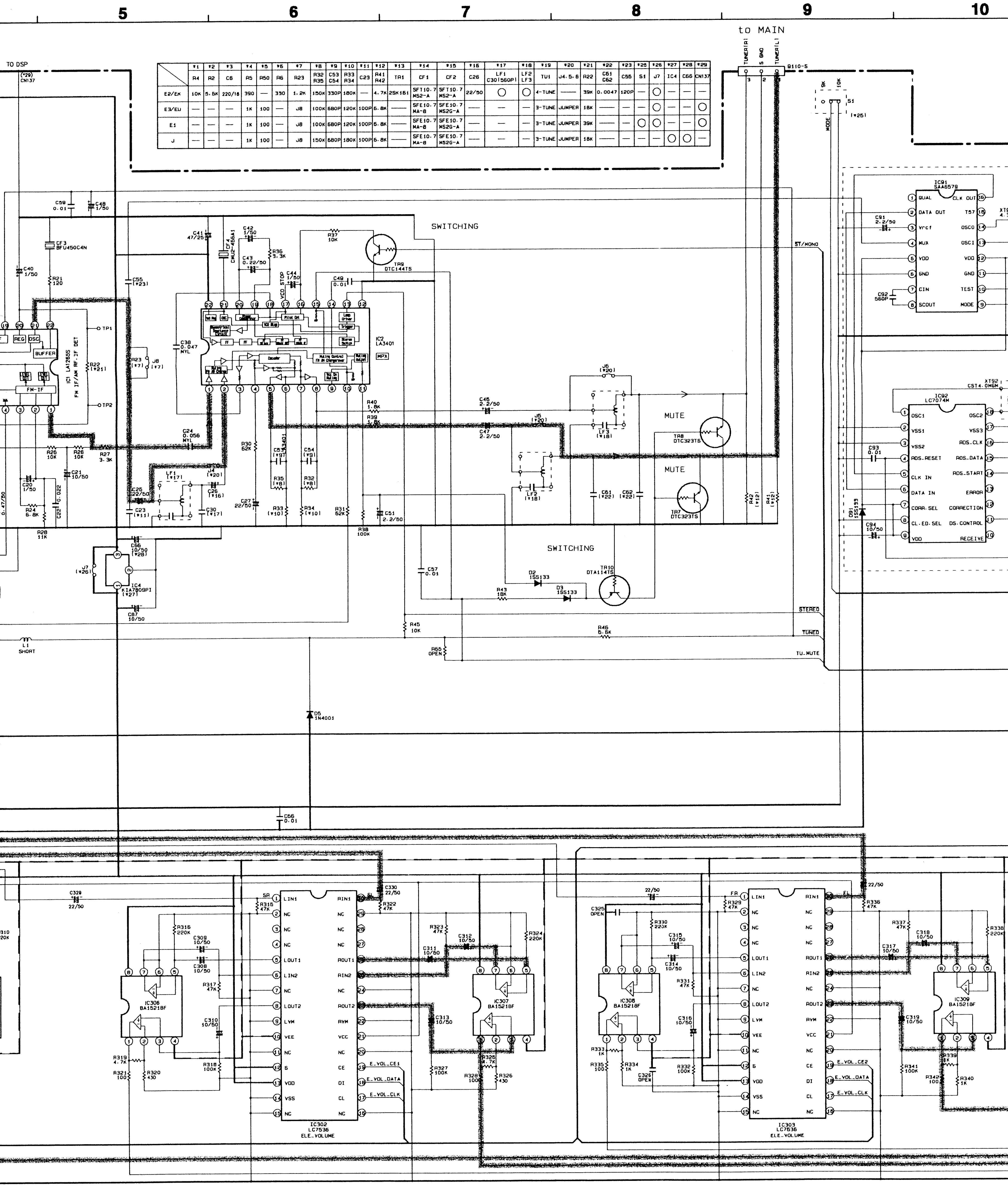
NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM

ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD

EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.


5
6
7
8
9
10
TO DSP
to MAIN
TUNER(R)
S GND
TUNER(L)
B110-S
MODE
S1
SWITCHING
MUTE
IC1 LA1265S FM IF/AM RF.IF DET
IC2 LA3401
MPX
IC4 KIA7809PI
IC91 SAA6579
IC92 LC7074M
TR7 DTC323TS
TR8 DTC323TS
TR9 DTC144TS
TR10 DTA114TS
D2 1SS133
D3 1SS133
D5 1N4001
D91 1SS133
CF3 BFU450C4N
CF4 CMU2-456A1
L1 SHORT
VCO STOP
ST/MONO
STEREO
TUNED
TU.MUTE
QUAL
DATA OUT
Vref
MUX
VDD
GND
CIN
SCOUT
CLK OUT
T57
OSCO
OSCI
TEST
MODE
OSC1
VSS1
VSS2
RDS.RESET
CLK IN
DATA IN
CORR.SEL
CL.ED.SEL
OSC2
VSS3
RDS.CLK
RDS.DATA
RDS.START
ERROR
CORRECTION
DS.CONTROL
RECEIVE
IC302 LC7536 ELE.VOLUME
IC303 LC7536 ELE.VOLUME
IC306 BA15218F
IC307 BA15218F
IC308 BA15218F
IC309 BA15218F
LIN1
LOUT1
LIN2
LOUT2
LVM
VEE
RIN1
ROUT1
RIN2
ROUT2
RVM
VCC
CE
DI
CL
E.VOL.CE1
E.VOL.DATA
E.VOL.CLK
E.VOL.CE2
TP1
TP2

	*1	*2	*3	*4	*5	*6	*7	*8	*9	*10	*11	*12	*13	*14	*15	*16	*17	*18	*19	*20	*21	*22	*23	*25	*26	*27	*28	*29
	R4	R2	C6	R5	R50	R6	R23	R32 R35	C53 C54	R33 R34	C23	R41 R42	TR1	CF1	CF2	C26	LF1 C30(560P)	LF2 LF3	TU1	J4.5.6	R22	C61 C62	C55	S1	J7	IC4	C66	CN137
E2/EK	10K	5.6K	220/16	390	—	390	1.2K	150K	330P	180K	—	4.7K	2SK161	SFT10.7 MS2-A	SFT10.7 MS2-A	22/50	○	○	4-TUNE	—	39K	0.0047	120P	—	○	—	—	—
E3/EU	—	—	—	1K	100	—	J8	100K	680P	120K	100P	6.8K	—	SFE10.7 MA-8	SFE10.7 MS2G-A	—	—	—	3-TUNE	JUMPER	18K	—	—	—	○	—	—	○
E1	—	—	—	1K	100	—	J8	100K	680P	120K	100P	6.8K	—	SFE10.7 MA-8	SFE10.7 MS2G-A	—	—	—	3-TUNE	JUMPER	39K	—	—	○	○	—	—	○
J	—	—	—	1K	100	—	J8	150K	680P	180K	100P	6.8K	—	SFE10.7 MA-8	SFE10.7 MS2G-A	—	—	—	3-TUNE	JUMPER	18K	—	—	—	—	○	○	—

TICE

RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
H VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT
DITION.
UIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR
CE.

WARNING:

Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

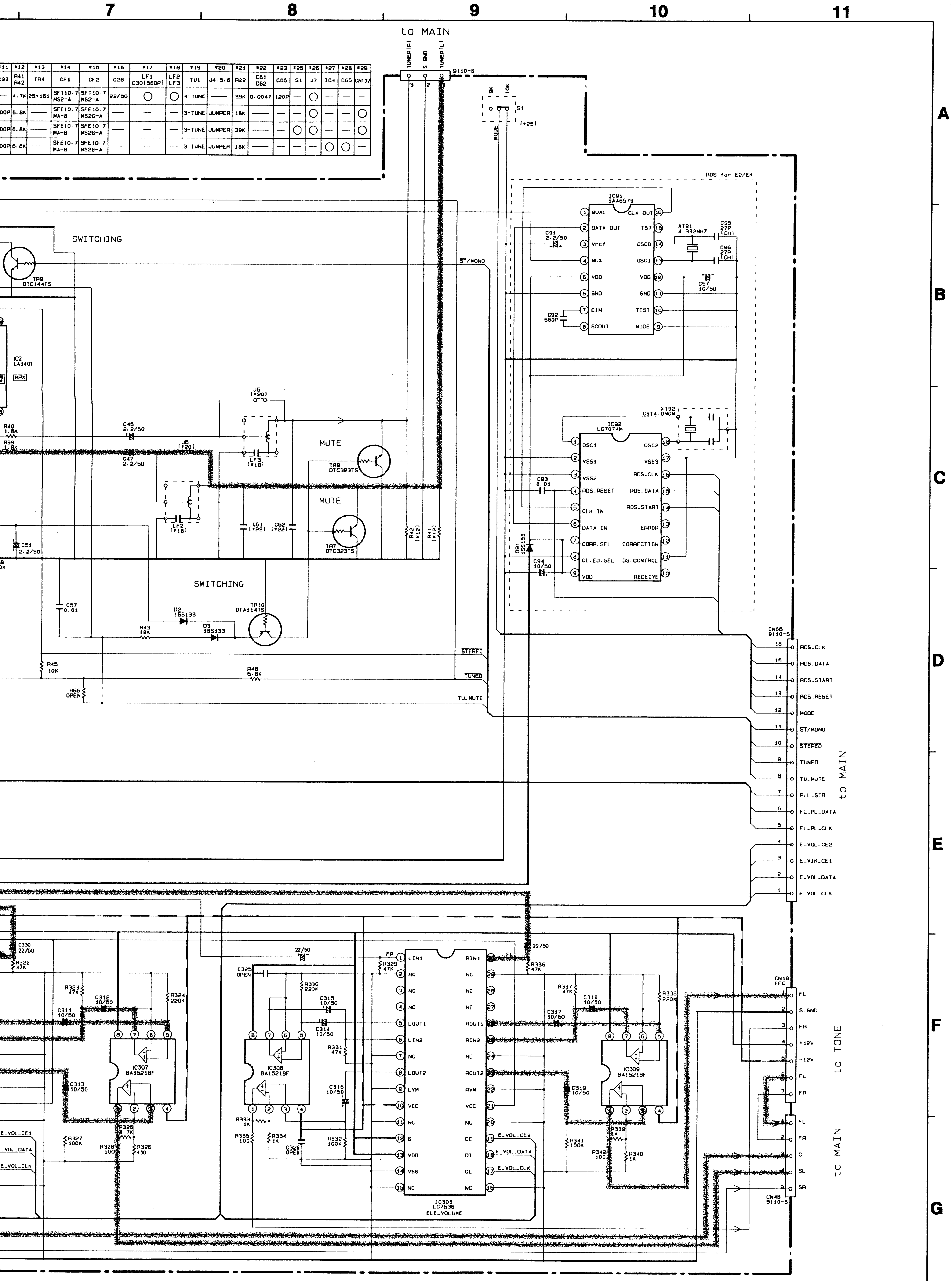
CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

WARNING:

DO NOT return the unit to the customer until the problem is located and corrected.

SCHE


7
8
9
10
11
A
B
C
D
E
F
G
H
to MAIN
TUNER(R)
S GND
TUNER(L)
9110-S
9K
10K
S1
(*25)
MODE
RDS for E2/EK
IC91
SAA6579
QUAL
DATA OUT
Vref
MUX
VDD
GND
CIN
SCOUT
CLK OUT
T57
OSCO
OSCI
VDD
GND
TEST
MODE
XT91
4.332MHz
C95 27P (CH)
C96 27P (CH)
C91 2.2/50
C97 10/50
C92 560P
SWITCHING
TR9 DTC144TS
IC2 LA3401
MPX
ST/MONO
J6 (*20)
C45 2.2/50
J5 (*20)
C47 2.2/50
LF3 (*18)
LF2 (*18)
MUTE
TR8 DTC323TS
TR7 DTC323TS
C61 (*22)
C62 (*22)
R42 (*12)
R41 (*12)
R40 1.8K
R39 1.8K
C51 2.2/50
XT92
CST4.0MGW
IC92
LC7074M
OSC1
VSS1
VSS2
RDS.RESET
CLK IN
DATA IN
CORR.SEL
CL.ED.SEL
VDD
OSC2
VSS3
RDS.CLK
RDS.DATA
RDS.START
ERROR
CORRECTION
DS.CONTROL
RECEIVE
C93 0.01
D91 1SS133
C94 10/50
C57 0.01
SWITCHING
TR10 DTA114TS
D2 1SS133
D3 1SS133
R43 18K
R45 10K
R46 5.6K
R65 OPEN
STEREO
TUNED
TU.MUTE
CN68 9110-S
RDS.CLK
RDS.DATA
RDS.START
RDS.RESET
MODE
ST/MONO
STEREO
TUNED
TU.MUTE
PLL.STB
FL.PL.DATA
FL.PL.CLK
E.VOL.CE2
E.VIK.CE1
E.VOL.DATA
E.VOL.CLK
to MAIN
C330 22/50
R322 47K
R323 47K
C312 10/50
R324 220K
C311 10/50
IC307 BA15218F
C313 10/50
R325 4.7K
R327 100K
R328 100
R326 430
E.VOL.CE1
E.VOL.DATA
E.VOL.CLK
C325 OPEN
R330 220K
C315 10/50
C314 10/50
IC308 BA15218F
R331 47K
C316 10/50
R333 1K
R335 100
R334 1K
C326 OPEN
R332 100K
22/50
R329 47K
IC303 LC7536 ELE.VOLUME
LIN1
NC
NC
NC
LOUT1
LIN2
NC
LOUT2
LVM
VEE
NC
S
VDD
VSS
NC
RIN1
NC
NC
NC
ROUT1
RIN2
NC
ROUT2
RVM
VCC
NC
CE
DI
CL
NC
E.VOL.CE2
E.VOL.DATA
E.VOL.CLK
22/50
R336 47K
R337 47K
C318 10/50
R338 220K
C317 10/50
IC309 BA15218F
C319 10/50
R339 4.7K
R341 100K
R342 100
R340 1K
CN18 FFC
FL
S GND
FR
+12V
-12V
FL
FR
to TONE
FL
FR
C
SL
SR
CN48 9110-S
to MAIN

*11	*12	*13	*14	*15	*16	*17	*18	*19	*20	*21	*22	*23	*25	*26	*27	*28	*29
C23	R41 R42	TR1	CF1	CF2	C26	LF1 C30(560P)	LF2 LF3	TU1	J4.5.6	R22	C61 C62	C55	S1	J7	IC4	C66	CN137
—	4.7K	2SK161	SFT10.7 MS2-A	SFT10.7 MS2-A	22/50	○	○	4-TUNE	—	39K	0.0047	120P	—	○	—	—	—
00P	6.8K	—	SFE10.7 MA-8	SFE10.7 MS2G-A	—	—	—	3-TUNE	JUMPER	18K	—	—	—	○	—	—	○
00P	6.8K	—	SFE10.7 MA-8	SFE10.7 MS2G-A	—	—	—	3-TUNE	JUMPER	39K	—	—	○	○	—	—	○
00P	6.8K	—	SFE10.7 MA-8	SFE10.7 MS2G-A	—	—	—	3-TUNE	JUMPER	18K	—	—	—	—	○	○	—

RNING:
s marked with this symbol ⚠ ▨ have critical characteristics.
ONLY replacement parts recommended by the manufacturer.

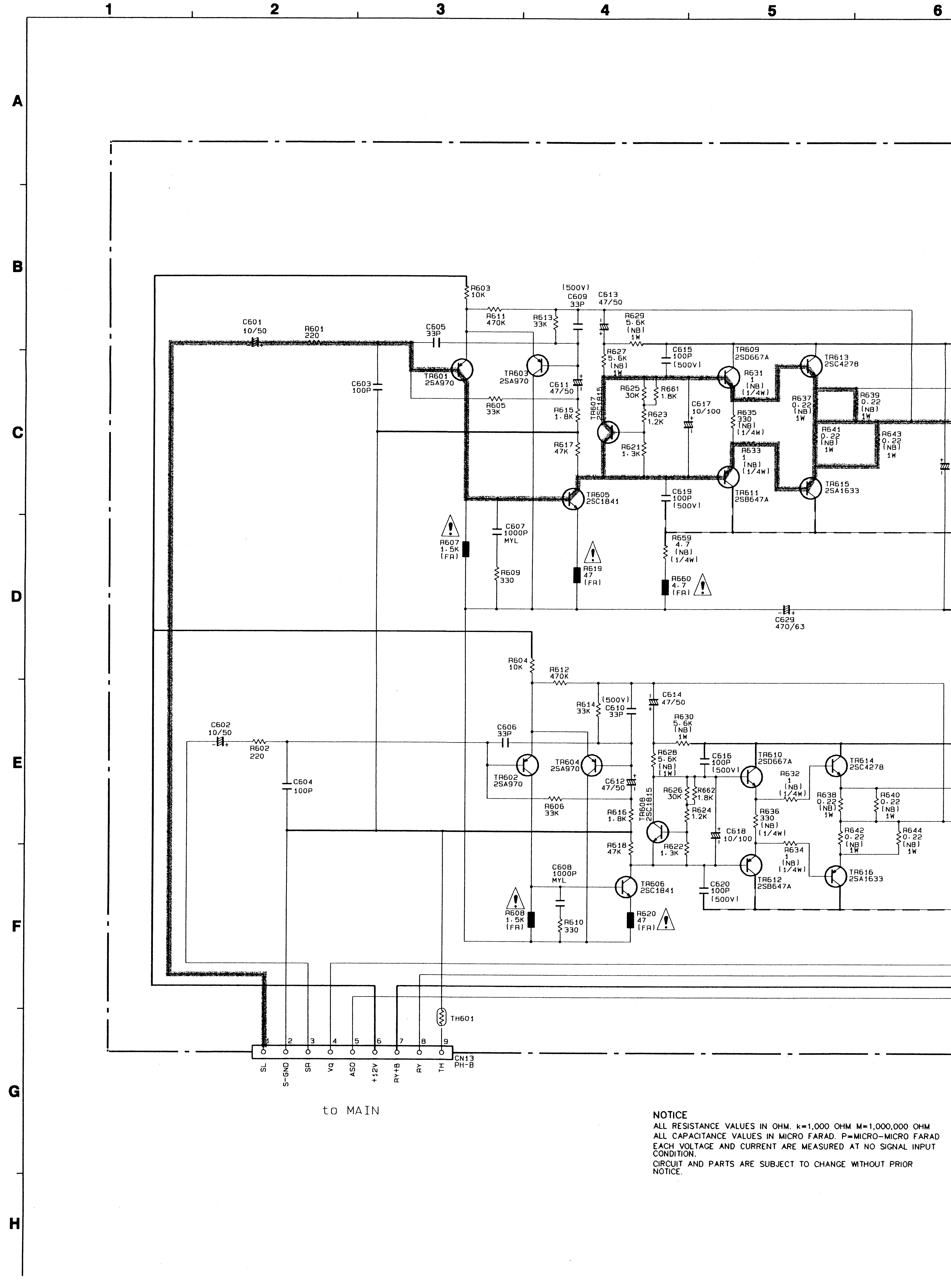
UTION:
re returning the unit to the customer, make sure you make either (1) a
age current check or (2) a line to chassis resistance check. If the leakage
ent exceeds 0.5 milliamps, or if the resistance from chassis to either side
he power cord is less than 460 kohms, the unit is detective.

RNING:
NOT return the unit to the customer until the problem is located and
ected.

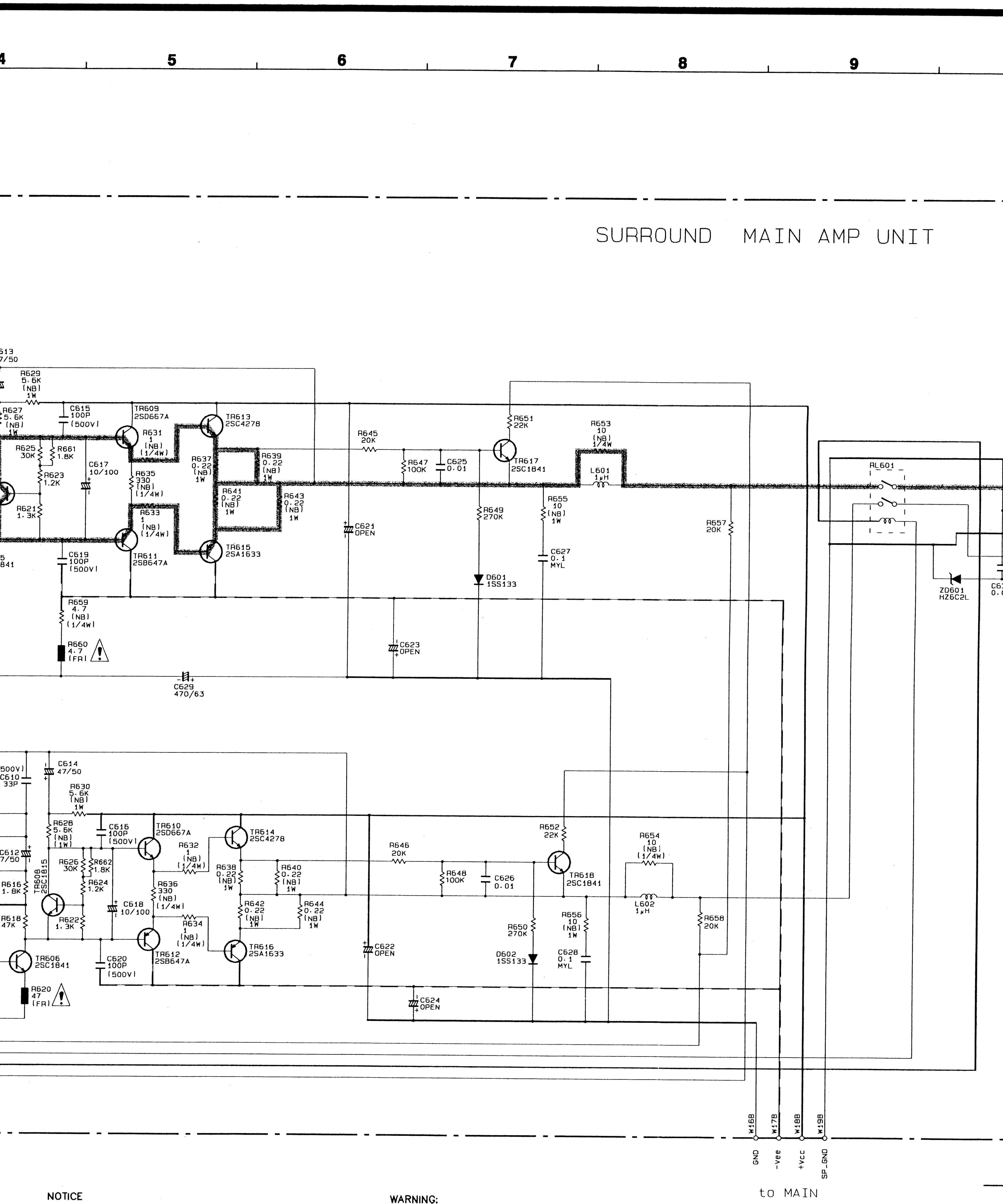
——— +B LINE
— — — -B LINE
▨ SIGNAL LINE

SCHEMATIC DIAGRAMS (3/6)
TUNER / VOLUME UNIT

SCHEMATIC DIAGRAMS (4/6)


1
2
3
4
5
6
A
B
C
D
E
F
G
H
R603 10K
(500V) C609 33P
C613 47/50
R611 470K
R613 33K
R629 5.6K (NB) 1W
C601 10/50
R601 220
C605 33P
R627 5.6K (NB) 1W
C615 100P (500V)
TR609 2SD667A
TR613 2SC4278
TR601 2SA970
TR603 2SA970
C611 47/50
C603 100P
R605 33K
R625 30K
R661 1.8K
R631 1 (NB) (1/4W)
R637 0.22 (NB) 1W
R639 0.22 (NB) 1W
R615 1.8K
TR607 2SC1815
R623 1.2K
C617 10/100
R635 330 (NB) (1/4W)
R641 0.22 (NB) 1W
R643 0.22 (NB) 1W
R617 47K
R621 1.3K
R633 1 (NB) (1/4W)
TR605 2SC1841
C619 100P (500V)
TR611 2SB647A
TR615 2SA1633
R607 1.5K (FR)
C607 1000P MYL
R659 4.7 (NB) (1/4W)
R619 47 (FR)
R609 330
R660 4.7 (FR)
C629 470/63
R604 10K
R612 470K
C614 47/50
R614 33K
(500V) C610 33P
R630 5.6K (NB) 1W
C602 10/50
R602 220
C606 33P
R628 5.6K (NB) (1W)
C616 100P (500V)
TR610 2SD667A
TR614 2SC4278
TR604 2SA970
TR602 2SA970
C604 100P
C612 47/50
R626 30K
R662 1.8K
R632 1 (NB) (1/4W)
R638 0.22 (NB) 1W
R640 0.22 (NB) 1W
R606 33K
R624 1.2K
R616 1.8K
TR608 2SC1815
R636 330 (NB) (1/4W)
R642 0.22 (NB) 1W
R644 0.22 (NB) 1W
C618 10/100
R618 47K
R622 1.3K
R634 1 (NB) (1/4W)
C608 1000P MYL
TR606 2SC1841
C620 100P (500V)
TR612 2SB647A
TR616 2SA1633
R608 1.5K (FR)
R610 330
R620 47 (FR)
TH601
1 2 3 4 5 6 7 8 9
CN13 PH-B
SL
S-GND
SR
VQ
ASO
+12V
RY+B
RY
TH
to MAIN

NOTICE
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

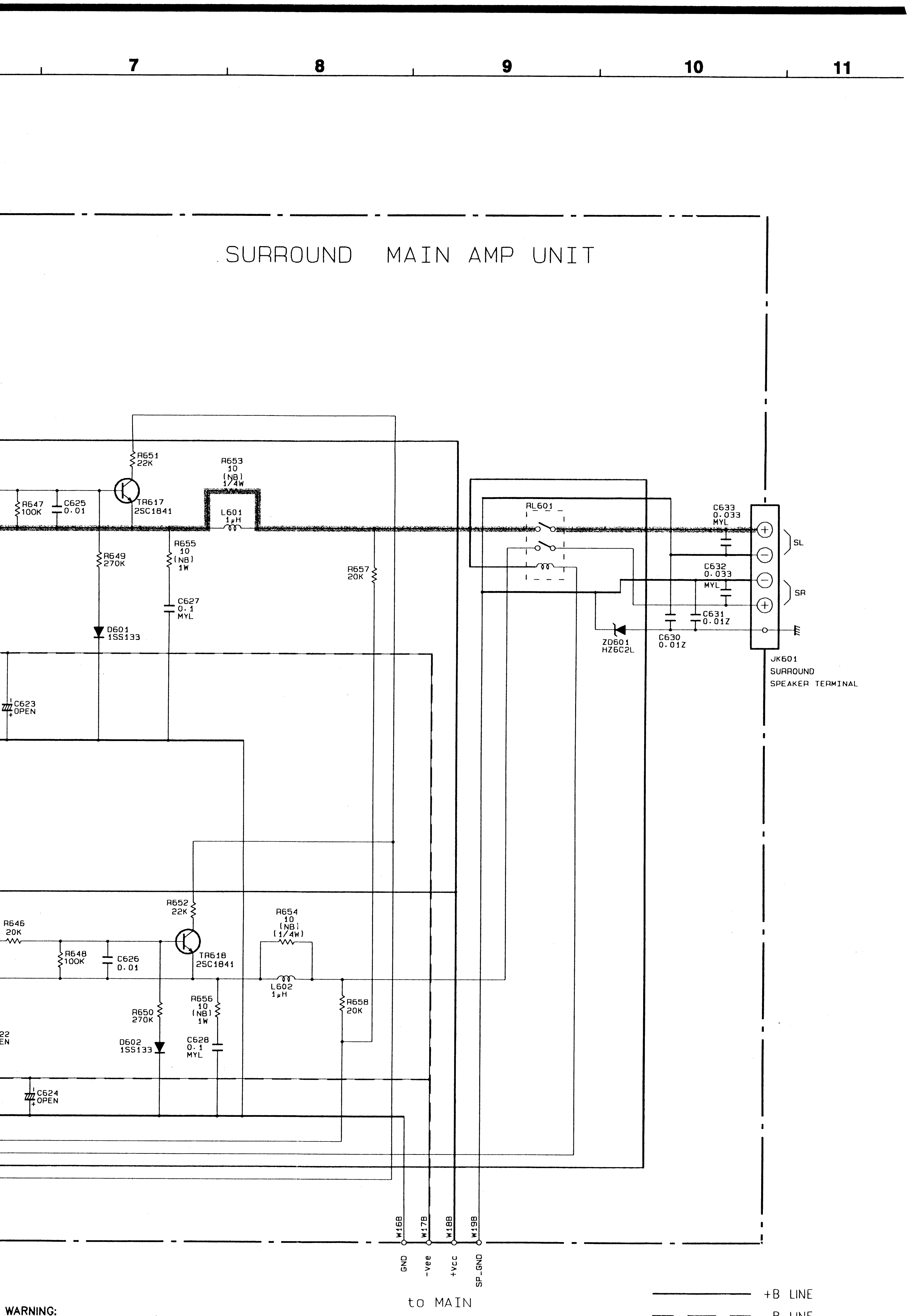

4
5
6
7
8
9
SURROUND MAIN AMP UNIT
R629 5.6K (NB) 1W
R627 5.6K (NB) 1W
C615 100P (500V)
TR609 2SD667A
TR613 2SC4278
R631 1 (NB) (1/4W)
R625 30K
R661 1.8K
R623 1.2K
R621 1.3K
C617 10/100
R635 330 (NB) (1/4W)
R637 0.22 (NB) 1W
R639 0.22 (NB) 1W
R641 0.22 (NB) 1W
R643 0.22 (NB) 1W
R633 1 (NB) (1/4W)
TR611 2SB647A
TR615 2SA1633
C619 100P (500V)
R645 20K
R647 100K
C625 0.01
R651 22K
TR617 2SC1841
R653 10 (NB) 1/4W
L601 1μH
R649 270K
R655 10 (NB) 1W
C621 OPEN
C627 0.1 MYL
D601 1SS133
R657 20K
RL601
ZD601 HZ6C2L
R659 4.7 (NB) (1/4W)
R660 4.7 (FR)
C623 OPEN
C629 470/63
C614 47/50
C610 33P
R630 5.6K (NB) 1W
R628 5.6K (NB) (1W)
C616 100P (500V)
TR610 2SD667A
TR614 2SC4278
C612 47/50
R632 1 (NB) (1/4W)
R626 30K
R662 1.8K
R624 1.2K
TR608 2SC1815
R616 1.8K
R618 47K
R622 1.3K
C618 10/100
R636 330 (NB) (1/4W)
R638 0.22 (NB) 1W
R640 0.22 (NB) 1W
R642 0.22 (NB) 1W
R644 0.22 (NB) 1W
R634 1 (NB) (1/4W)
TR612 2SB647A
TR616 2SA1633
TR606 2SC1841
C620 100P (500V)
R620 47 (FR)
R646 20K
R648 100K
C626 0.01
R652 22K
TR618 2SC1841
R654 10 (NB) (1/4W)
L602 1μH
R650 270K
R656 10 (NB) 1W
C628 0.1 MYL
D602 1SS133
R658 20K
C622 OPEN
C624 OPEN
W16B
W17B
W18B
W19B
GND
-Vee
+Vcc
SP_GND
to MAIN

NOTICE
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is detective.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.


7
8
9
10
11
SURROUND MAIN AMP UNIT
R651 22K
TR617 2SC1841
R653 10 (NB) 1/4W
L601 1μH
R647 100K
C625 0.01
R649 270K
R655 10 (NB) 1W
C627 0.1 MYL
D601 1SS133
R657 20K
C623 OPEN
RL601
C633 0.033 MYL
C632 0.033 MYL
C631 0.01Z
C630 0.01Z
ZD601 HZ6C2L
SL
SR
JK601
SURROUND
SPEAKER TERMINAL
R646 20K
R652 22K
TR618 2SC1841
R648 100K
C626 0.01
R654 10 (NB) (1/4W)
L602 1μH
R656 10 (NB) 1W
R650 270K
D602 1SS133
C628 0.1 MYL
R658 20K
22
EN
C624 OPEN
W16B
W17B
W18B
W19B
GND
-Vee
+Vcc
SP_GND
to MAIN

——— +B LINE

— — — -B LINE

▨ SIGNAL LINE

WARNING:
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CAUTION:
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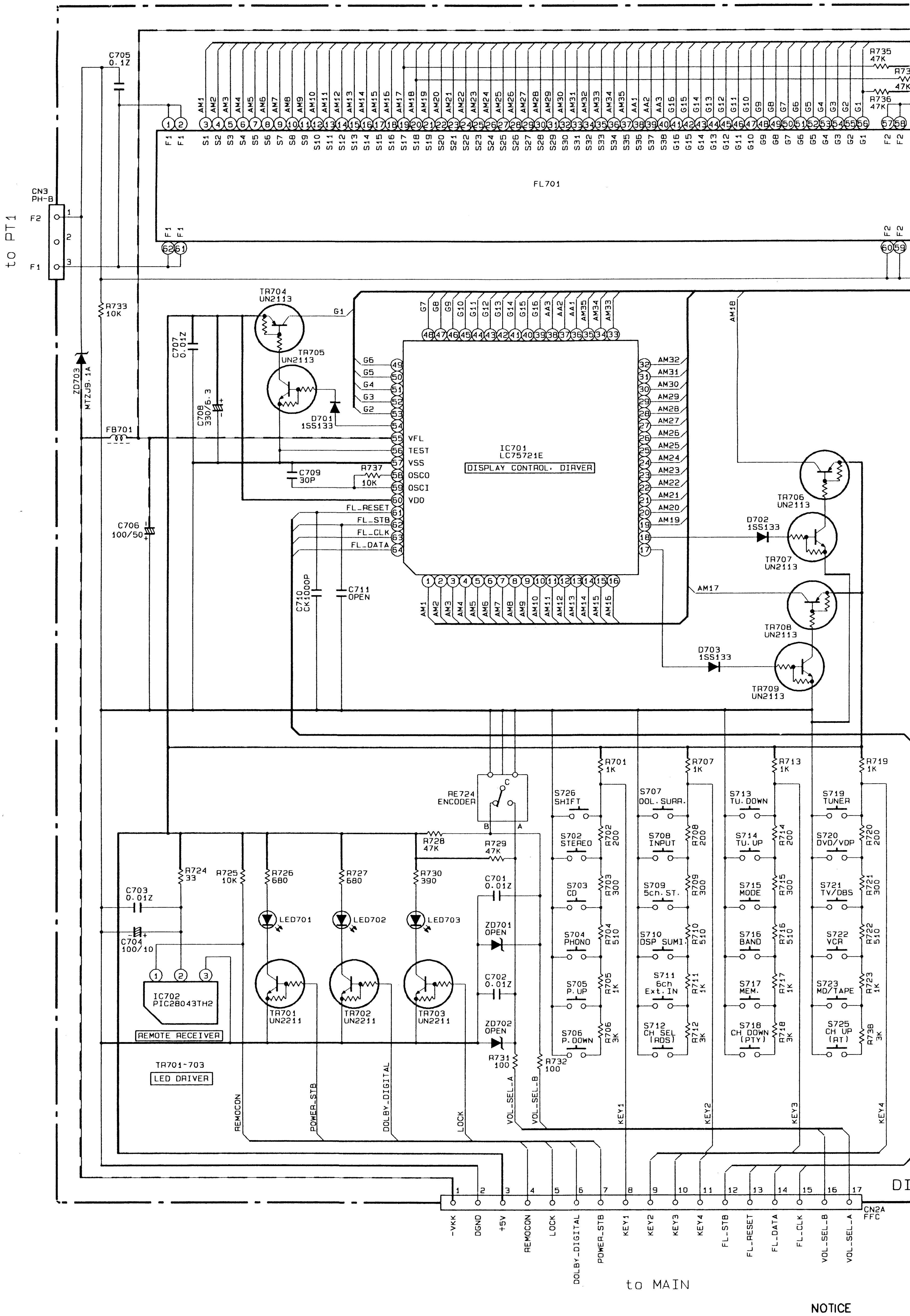
WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

SCHEMATIC DIAGRAMS (4/6)
SURROUND UNIT

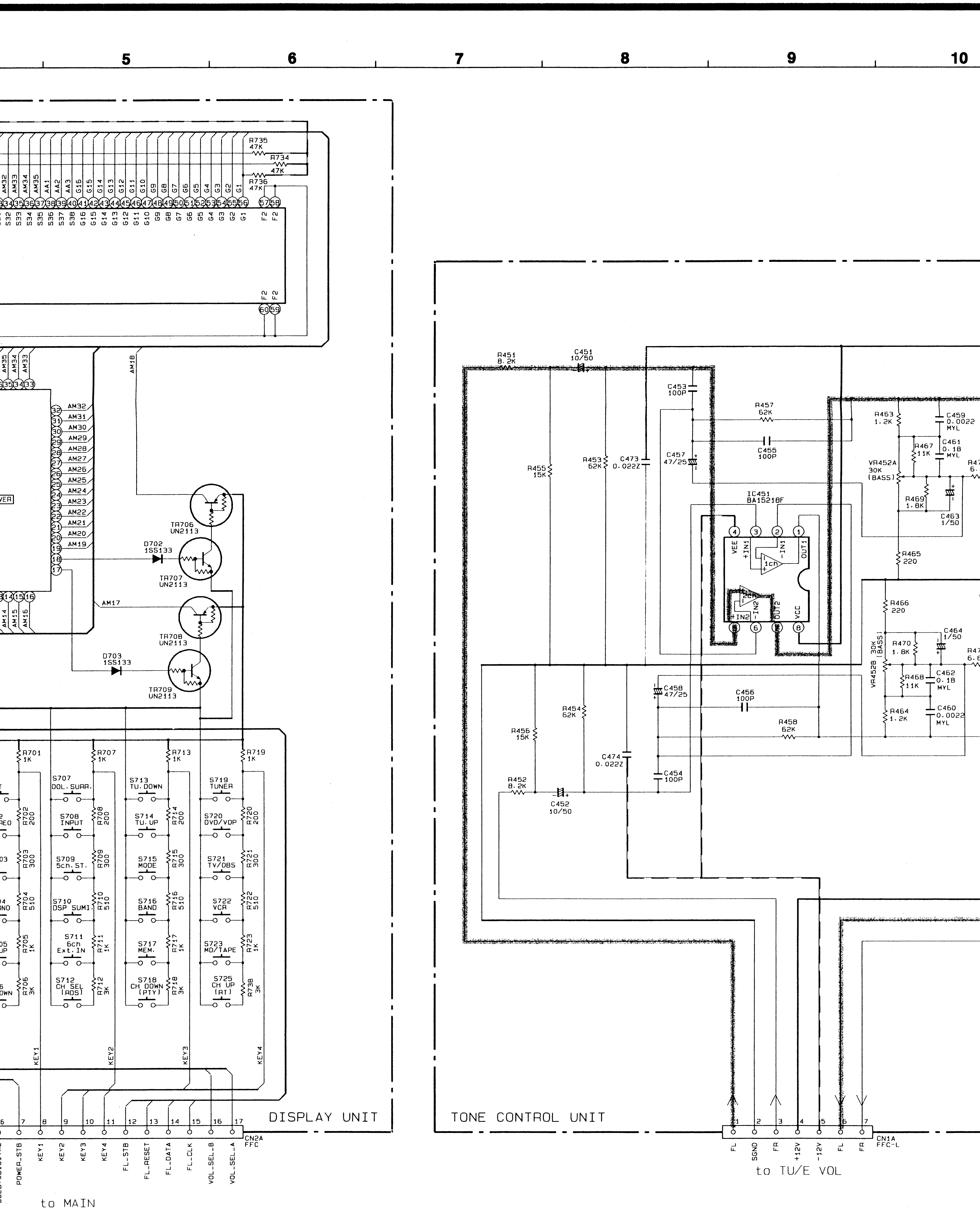
SCHEMATIC DIAGRAMS (5/6)

1 2 3 4 5



to PT1
CN3 PH-B
F2
F1
C705 0.1Z
FL701
R735 47K
R736 47K
R733 10K
ZD703 MTZJ9.1A
FB701
C706 100/50
C707 0.01Z
C708 330/6.3
TR704 UN2113
TR705 UN2113
D701 1SS133
C709 30P
R737 10K
C710 CK1000P
C711 OPEN
IC701 LC75721E
DISPLAY CONTROL, DRIVER
VFL
TEST
VSS
OSCO
OSCI
VDD
FL_RESET
FL_STB
FL_CLK
FL_DATA
TR706 UN2113
D702 1SS133
TR707 UN2113
TR708 UN2113
D703 1SS133
TR709 UN2113
RE724 ENCODER
R728 47K
R729 47K
C701 0.01Z
ZD701 OPEN
C702 0.01Z
ZD702 OPEN
R731 100
R732 100
R724 33
R725 10K
R726 680
R727 680
R730 390
C703 0.01Z
C704 100/10
LED701
LED702
LED703
IC702 PIC28043TH2
REMOTE RECEIVER
TR701 UN2211
TR702 UN2211
TR703 UN2211
TR701-703
LED DRIVER
S726 SHIFT
S702 STEREO
S703 CD
S704 PHONO
S705 P.UP
S706 P.DOWN
R701 1K
R702 200
R703 300
R704 510
R705 1K
R706 3K
S707 DOL.SURR.
S708 INPUT
S709 5ch.ST.
S710 DSP SUMI
S711 6ch Ext.IN
S712 CH SEL (RDS)
R707 1K
R708 200
R709 300
R710 510
R711 1K
R712 3K
S713 TU.DOWN
S714 TU.UP
S715 MODE
S716 BAND
S717 MEM.
S718 CH DOWN (PTY)
R713 1K
R714 200
R715 300
R716 510
R717 1K
R718 3K
S719 TUNER
S720 DVD/VDP
S721 TV/DBS
S722 VCR
S723 MD/TAPE
S725 CH UP (RT)
R719 1K
R720 200
R721 300
R722 510
R723 1K
R738 3K
REMOCON
POWER_STB
DOLBY_DIGITAL
LOCK
VOL_SEL_A
VOL_SEL_B
KEY1
KEY2
KEY3
KEY4
CN2A FFC
-VKK
DGND
+5V
REMOCON
LOCK
DOLBY_DIGITAL
POWER_STB
KEY1
KEY2
KEY3
KEY4
FL_STB
FL_RESET
FL_DATA
FL_CLK
VOL_SEL_B
VOL_SEL_A
to MAIN
DI

NOTICE
ALL RESISTANCE VAL
ALL CAPACITANCE V
EACH VOLTAGE AND
CONDITION.
CIRCUIT AND PARTS
NOTICE.



5
6
7
8
9
10
R735 47K
R734 47K
R736 47K
AM18
AM17
TR706 UN2113
D702 1SS133
TR707 UN2113
TR708 UN2113
D703 1SS133
TR709 UN2113
R701 1K
R707 1K
R713 1K
R719 1K
S707 DOL.SURR.
S708 INPUT
S709 5ch.ST.
S710 DSP SUMI
S711 6ch Ext.IN
S712 CH SEL (RDS)
S713 TU.DOWN
S714 TU.UP
S715 MODE
S716 BAND
S717 MEM.
S718 CH DOWN (PTY)
S719 TUNER
S720 DVD/VDP
S721 TV/DBS
S722 VCR
S723 MD/TAPE
S725 CH UP (RT)
KEY1
KEY2
KEY3
KEY4
DISPLAY UNIT
CN2A FFC
POWER_STB
FL_STB
FL_RESET
FL_DATA
FL_CLK
VOL_SEL_B
VOL_SEL_A
to MAIN
R451 8.2K
C451 10/50
C453 100P
R457 62K
C455 100P
C457 47/25
R455 15K
R453 62K
C473 0.022Z
IC451 BA15218F
VEE
+IN1
-IN1
OUT1
+IN2
-IN2
OUT2
VCC
R463 1.2K
C459 0.0022 MYL
R467 11K
C461 0.18 MYL
VR452A 30K (BASS)
R469 1.8K
C463 1/50
R465 220
R466 220
C464 1/50
R470 1.8K
VR452B 30K (BASS)
R468 11K
C462 0.18 MYL
R464 1.2K
C460 0.0022 MYL
C458 47/25
C456 100P
R454 62K
R458 62K
R456 15K
C474 0.022Z
C454 100P
R452 8.2K
C452 10/50
TONE CONTROL UNIT
CN1A FFC-L
FL
SGND
FR
+12V
-12V
to TU/E VOL

NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
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WARNING:

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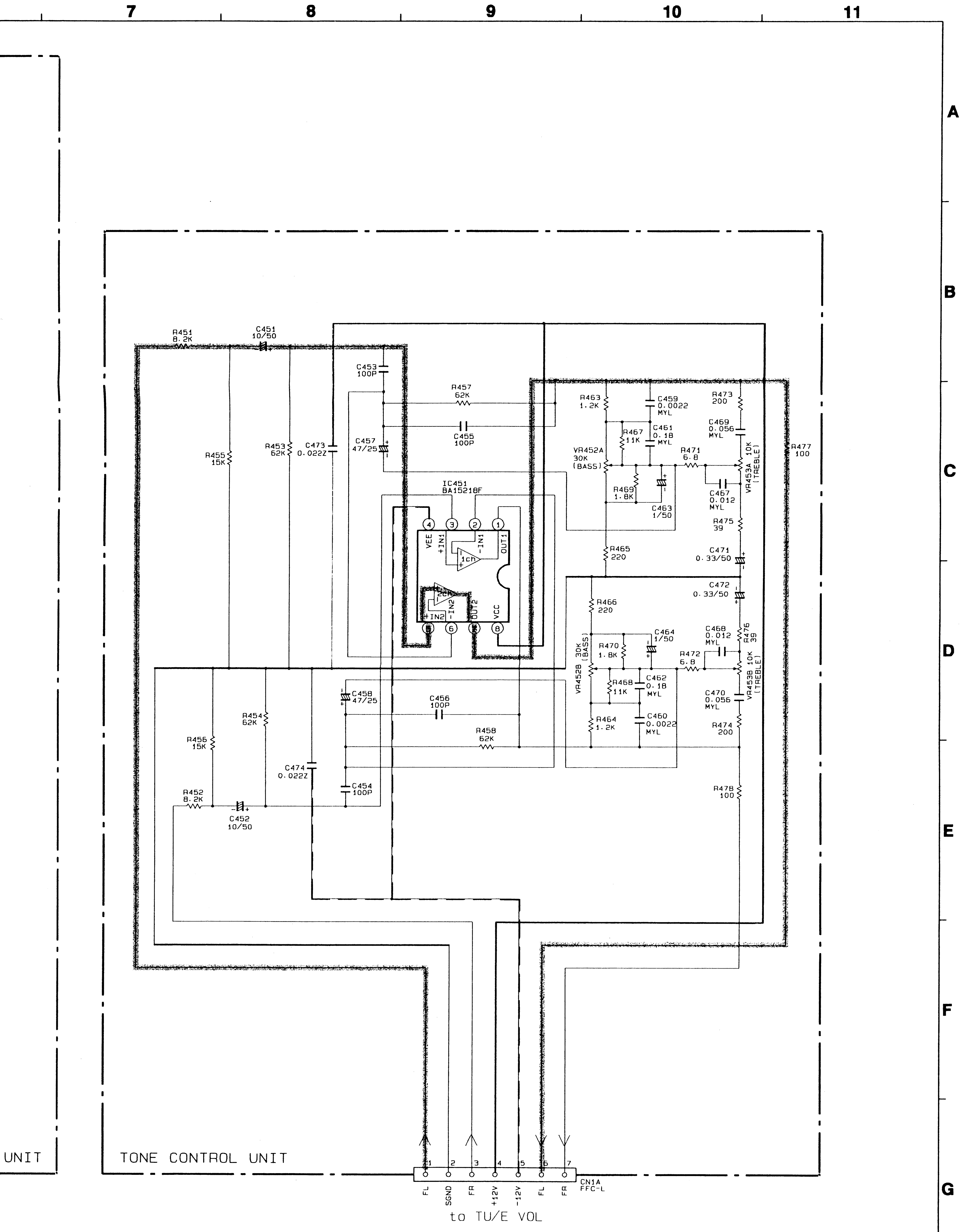
CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

WARNING:

DO NOT return the unit to the customer until the problem is located and corrected.

SCHE


7
8
9
10
11
A
B
C
D
E
F
G
UNIT
TONE CONTROL UNIT
R451
8.2K
C451
10/50
C453
100P
R457
62K
C455
100P
C457
47/25
R455
15K
R453
62K
C473
0.022Z
IC451
BA15218F
VEE
+IN1
-IN1
OUT1
1ch
2ch
+IN2
-IN2
OUT2
VCC
R463
1.2K
C459
0.0022
MYL
R467
11K
C461
0.18
MYL
R473
200
C469
0.056
MYL
VR452A
30K
(BASS)
R471
6.8
VR453A 10K
(TREBLE)
R477
100
R469
1.8K
C463
1/50
C467
0.012
MYL
R475
39
R465
220
C471
0.33/50
C472
0.33/50
R466
220
C464
1/50
C468
0.012
MYL
R476
39
VR452B 30K
(BASS)
R470
1.8K
R472
6.8
VR453B 10K
(TREBLE)
R468
11K
C462
0.18
MYL
C470
0.056
MYL
R464
1.2K
C460
0.0022
MYL
R474
200
C458
47/25
C456
100P
R458
62K
R454
62K
R456
15K
C474
0.022Z
C454
100P
R452
8.2K
C452
10/50
R478
100
1
2
3
4
5
6
7
CN1A
FFC-L
FL
SGND
FR
+12V
-12V
FL
FR
to TU/E VOL

k=1,000 OHM M=1,000,000 OHM
RO FARAD. P=MICRO-MICRO FARAD
E MEASURED AT NO SIGNAL INPUT

T TO CHANGE WITHOUT PRIOR

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is detective.

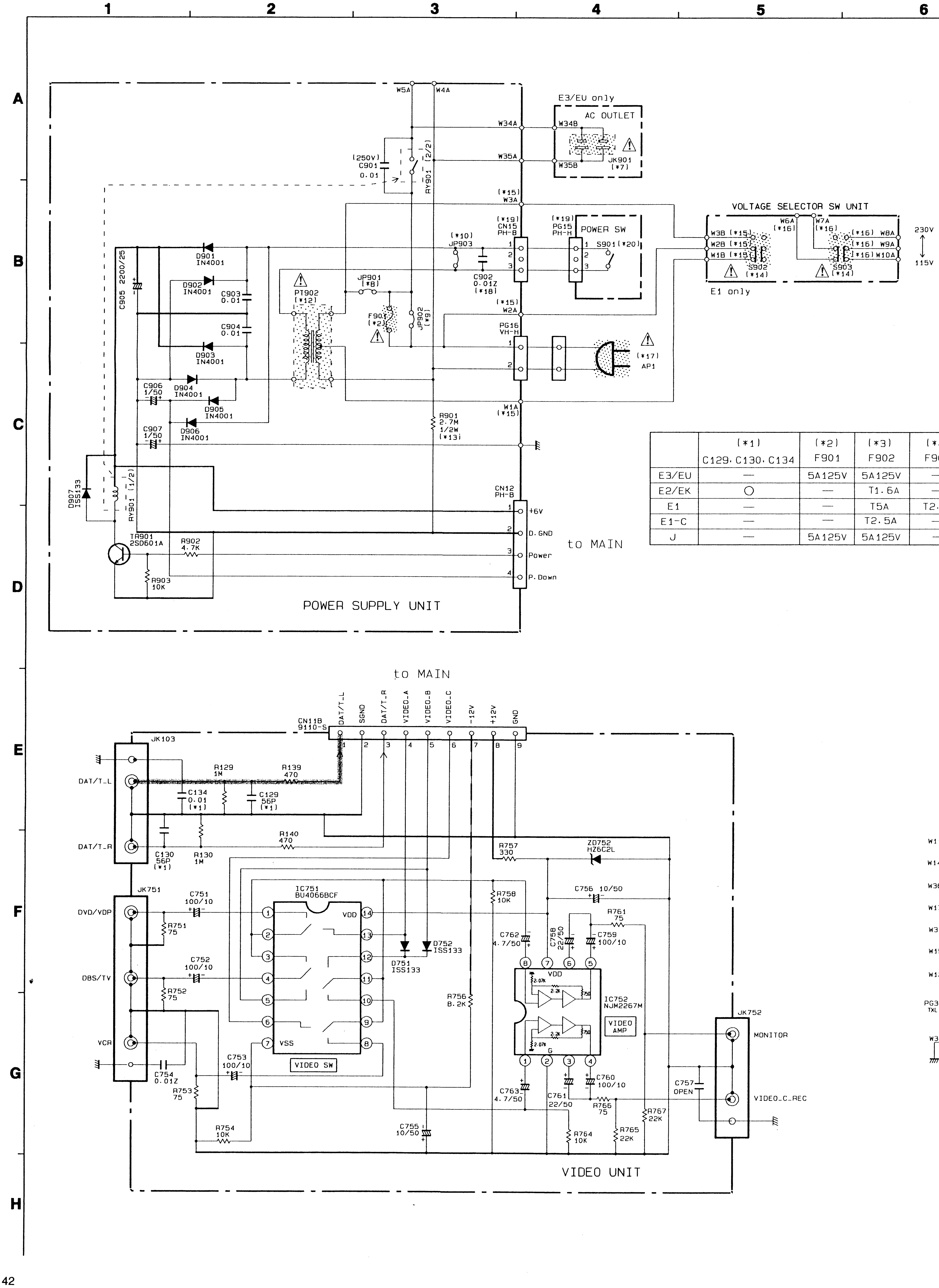
WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

——— +B LINE
— — — -B LINE
▨ SIGNAL LINE

H

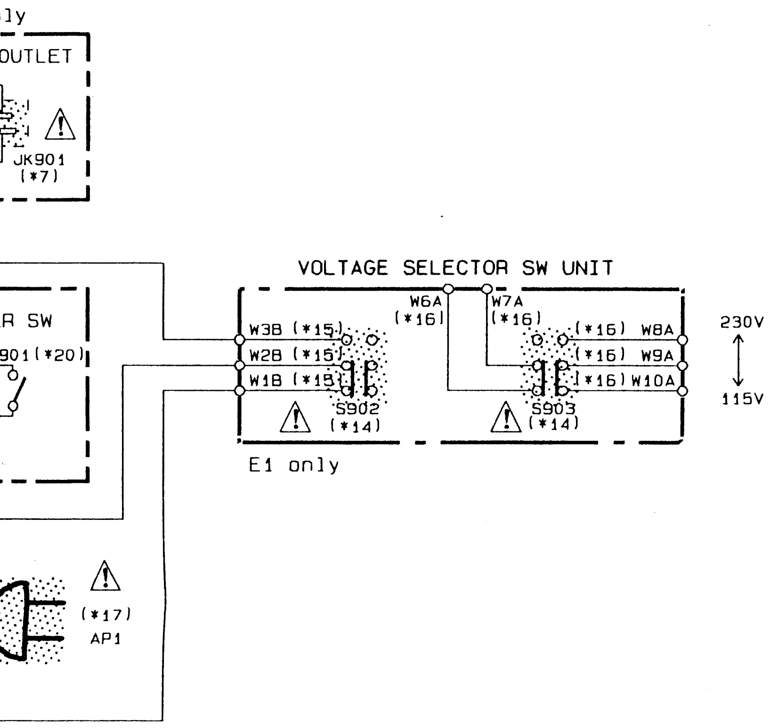
SCHEMATIC DIAGRAMS (5/6)
FL / TONE UNIT

SCHEMATIC DIAGRAM (6/6)


1
2
3
4
5
6
A
B
C
D
E
F
G
H
W5A
W4A
E3/EU only
AC OUTLET
W34A
W34B
W35A
W35B
JK901
(*7)
(250V)
C901
0.01
RY901 (2/2)
(*15)
W3A
VOLTAGE SELECTOR SW UNIT
W6A
(*16)
W7A
(*16)
W3B (*15)
W2B (*15)
W1B (*15)
(*16) W8A
(*16) W9A
(*16) W10A
S902
(*14)
S903
(*14)
230V
115V
E1 only
(*19)
CN15
PH-B
(*19)
PG15
PH-H
POWER SW
S901 (*20)
(*10)
JP903
C902
0.01Z
(*18)
D901
IN4001
D902
IN4001
C903
0.01
C904
0.01
D903
IN4001
C905 2200/25
PT902
(*12)
JP901
(*8)
F901
(*2)
JP902
(*9)
(*15)
W2A
PG16
VH-H
(*17)
AP1
C906
1/50
D904
IN4001
D905
IN4001
C907
1/50
D906
IN4001
R901
2.7M
1/2W
(*13)
W1A
(*15)
D907
ISS133
RY901 (1/2)
CN12
PH-B
+6V
D.GND
Power
P.Down
to MAIN
TR901
2SD601A
R902
4.7K
R903
10K
POWER SUPPLY UNIT
to MAIN
CN11B
9110-S
DAT/T_L
SGND
DAT/T_R
VIDEO_A
VIDEO_B
VIDEO_C
-12V
+12V
GND
JK103
DAT/T_L
DAT/T_R
R129
1M
R139
470
C134
0.01
(*1)
C129
56P
(*1)
R140
470
C130
56P
(*1)
R130
1M
R757
330
ZD752
HZ6C2L
JK751
DVD/VDP
DBS/TV
VCR
C751
100/10
R751
75
C752
100/10
R752
75
IC751
BU4066BCF
VDD
VSS
VIDEO SW
D752
ISS133
D751
ISS133
R758
10K
C756 10/50
R761
75
C762
4.7/50
C758
22/50
C759
100/10
IC752
NJM2267M
VIDEO AMP
R756
8.2K
C754
0.01Z
C753
100/10
R753
75
R754
10K
C755
10/50
C763
4.7/50
C761
22/50
C760
100/10
R766
75
R764
10K
R765
22K
R767
22K
C757
OPEN
JK752
MONITOR
VIDEO_C_REC
VIDEO UNIT
W1
W14
W36
W17
W3
W19
W12
PG3
TXL
W3

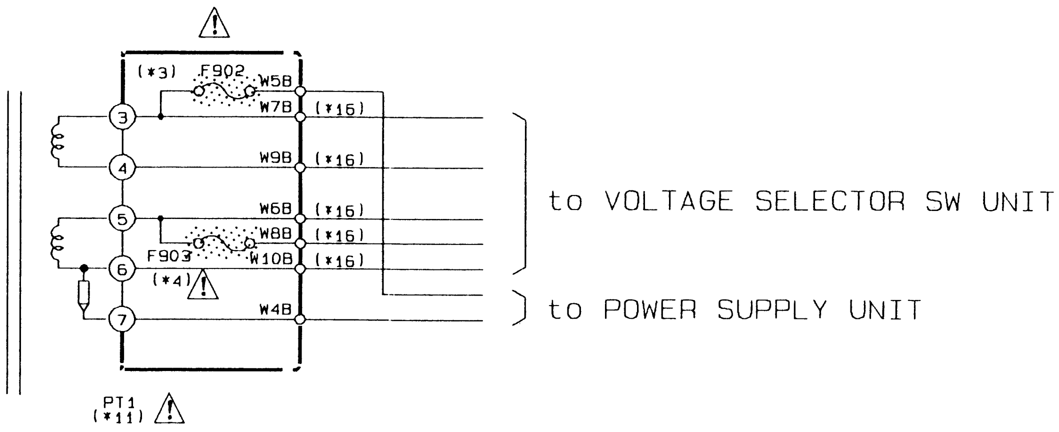
	(*1) C129, C130, C134	(*2) F901	(*3) F902	(* F9
E3/EU	—	5A125V	5A125V	—
E2/EK	○	—	T1.6A	—
E1	—	—	T5A	T2.
E1-C	—	—	T2.5A	—
J	—	5A125V	5A125V	—

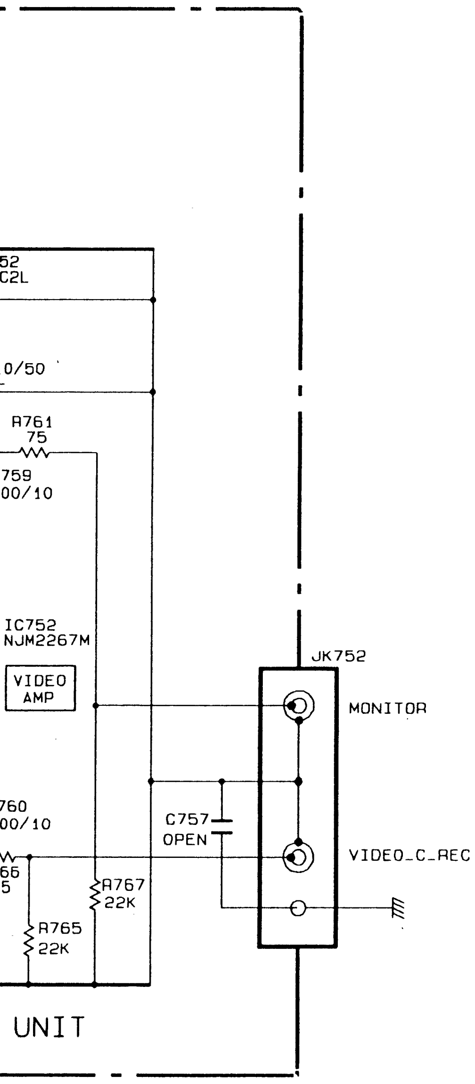
5 6 7 8 9


ly
OUTLET
JK901
(*7)
VOLTAGE SELECTOR SW UNIT
W6A
(*16)
W7A
(*16)
W3B (*15)
W2B (*15)
W1B (*15)
(*16) W8A
(*16) W9A
(*16) W10A
S902
(*14)
S903
(*14)
230V
115V
R SW
901 (*20)
E1 only
(*17)
AP1

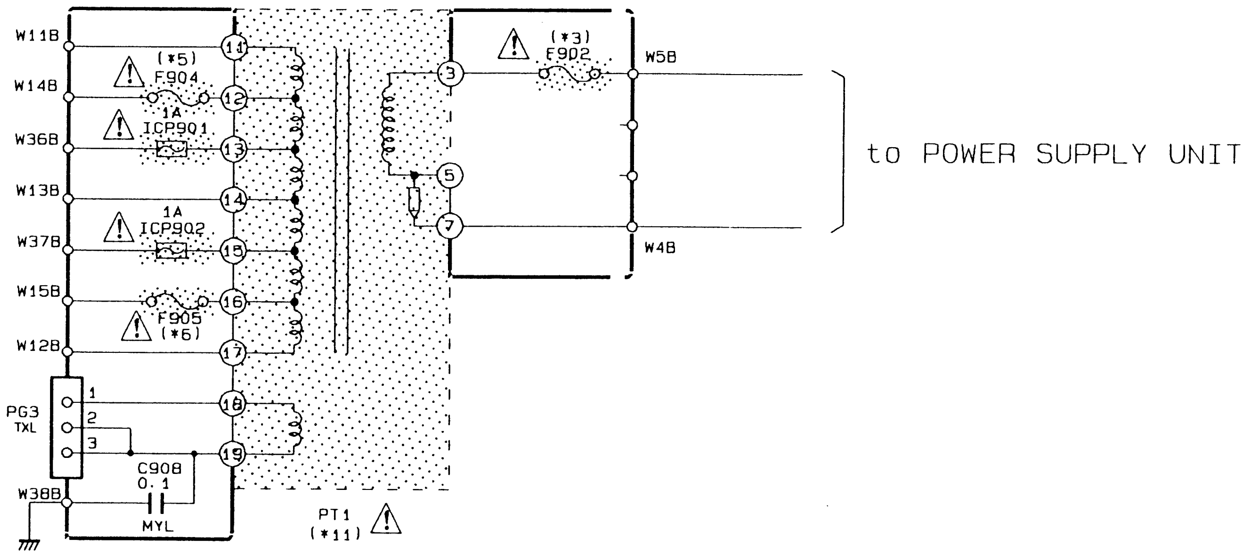
	(*1) C129, C130, C134	(*2) F901	(*3) F902	(*4) F903	(*5) F904	(*6) F905	(*7) JK901	(*8) JP901	(*9) JP902	(*10) JP903	(*11) PT1	(*12) PT902	(*13) R901	(*14) S902, 903	(*15) W1~W3	(*16) W6~W10	(
E3/EU	—	5A125V	5A125V	—	1.6A250V	1.6A250V	○	○	—	○	BT01351	BT00531	○	—	—	—	EV
E2/EK	○	—	T1.6A	—	T1A	T1A	—	○	○	—	BT01352	BT00532	—	—	—	—	EV
E1	—	—	T5A	T2.5A	T1A	T1A	—	—	○	—	BT01353	BT00533	—	○	○	○	EV
E1-C	—	—	T2.5A	—	T1A	T1A	—	○	○	—	BT01352	BT00532	—	—	—	—	EV
J	—	5A125V	5A125V	—	1.6A250V	1.6A250V	○	○	—	○	BT01354	BT00534	—	—	—	—	EV

AIN


(*3) F902
W5B
W7B (*16)
W9B (*16)
W6B (*16)
W8B (*16)
F903
W10B (*16)
(*4)
W4B
3
4
5
6
7
PT1
(*11)
to VOLTAGE SELECTOR SW UNIT
to POWER SUPPLY UNIT


52
C2L
0/50
R761
75
759
00/10
IC752
NJM2267M
VIDEO AMP
JK752
MONITOR
C757
OPEN
VIDEO_C_REC
760
00/10
66
5
R767
22K
R765
22K
UNIT

E3/EU, E2/EK, E1-C, J


W11B
W14B
W36B
W13B
W37B
W15B
W12B
PG3
TXL
W38B
(*5)
F904
1A
ICP901
1A
ICP902
F905
(*6)
11
12
13
14
15
16
17
18
19
1
2
3
C908
0.1
MYL
PT1
(*11)
(*3)
F902
W5B
W4B
3
5
7
to POWER SUPPLY UNIT

NOTICE
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

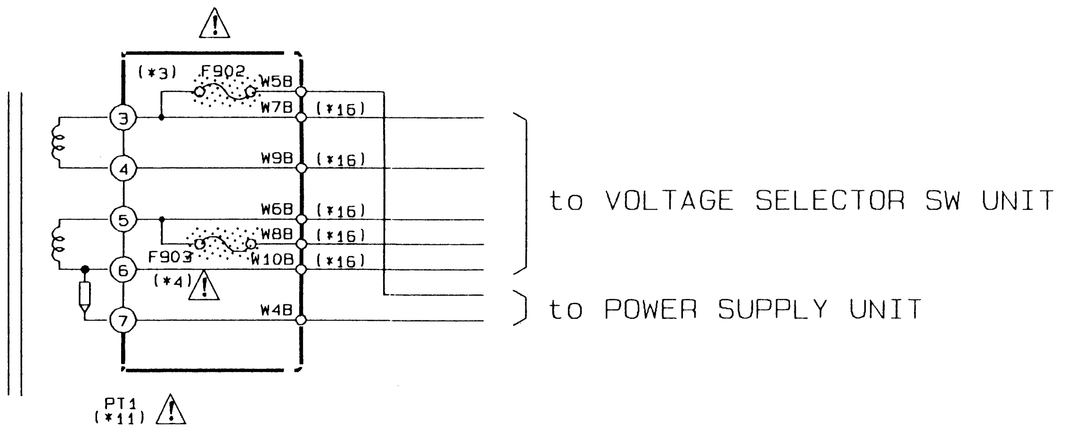
WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (
leakage current check or (2) a line to chassis resistance check. If the le
current exceeds 0.5 milliamps, or if the resistance from chassis to either
of the power cord is less than 460 kohms, the unit is defective.

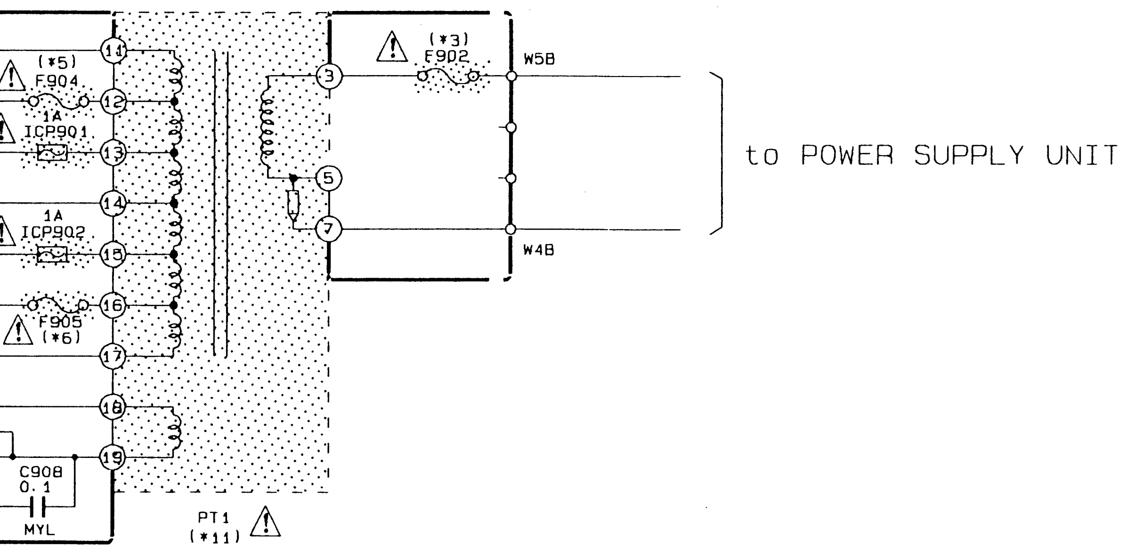
WARNING:
DO NOT return the unit to the customer until the problem is located and
corrected.

SCHEMATIC DIAGRAMS
P. SUPPLY / VIDEO UNIT

(*5) F904	(*6) F905	(*7) JK901	(*8) JP901	(*9) JP902	(*10) JP903	(*11) PT1	(*12) PT902	(*13) R901	(*14) S902, 903	(*15) W1~W3	(*16) W6~W10	(*17) AP1	(*18) C902	(*19) PG15 CN15	(*20) S901
.6A250V	1.6A250V	○	○	—	○	BT01351	BT00531	○	—	—	—	EV00701	—	—	—
T1A	T1A	—	○	○	—	BT01352	BT00532	—	—	—	—	EV00586	○	○	○
T1A	T1A	—	—	○	—	BT01353	BT00533	—	○	○	○	EV00586	○	○	○
T1A	T1A	—	○	○	—	BT01352	BT00532	—	—	—	—	EV00586	○	○	○
.6A250V	1.6A250V	○	○	—	○	BT01354	BT00534	—	—	—	—	EV00582	—	—	—


(*3) F902
W5B
W7B (*16)
W9B (*16)
W6B (*16)
W8B (*16)
F903 W10B (*16)
(*4)
W4B
3
4
5
6
7
to VOLTAGE SELECTOR SW UNIT
to POWER SUPPLY UNIT
PT1
(*11)

E3/EU, E2/EK, E1-C, J


(*5)
F904
1A
ICP901
1A
ICP902
F905
(*6)
11
12
13
14
15
16
17
18
19
C908
0.1
MYL
(*3)
F902
W5B
W4B
3
5
7
to POWER SUPPLY UNIT
PT1
(*11)

——— +B LINE

— — — -B LINE

▨ SIGNAL LINE

CE
RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT
TION.
IT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR
E.

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is detective.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

SCHEMATIC DIAGRAMS (6/6)
P. SUPPLY / VIDEO UNIT